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LECTURES
ON THE
THEORY AND PRACTICE OF MEDICINE;

NOW IN COURSE OF DELIVERY AT THE THEATRE OF ANATOMY AND MEDICINE, WEBB-STREET, SOUTHWARK.

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DISEASES OF THE URINARY ORGANS.—*Causes of disease of the kidneys, and changes in the urine; their connection with the brain. Table of the diseases of the ureters and kidney. Organic diseases of those parts. Urinary calculus; its various species. Granulated kidney. Functional diseases of the urinary organs. Diabetes. Morbid secretions and admixtures. Diseases of the bladder, prostate, and urethra.*

GENTLEMEN:—I must now draw your particular attention to

THE DISEASES OF THE URINARY ORGANS.

Few diseases are more frequent, or more practically important, or require a more special attention, than these diseases, whether they be viewed alone, or as *causes* or *effects* of other diseases. Happily we have a treatise on the subject, of incomparable excellence, that of Dr. Prout. To the forthcoming edition of this original and important work I must beg your most particular attention. It is a specimen of what medical works ought to be; and it is indispensable to all who undertake the treatment of diseases of the urinary organs. To this work those of Dr. Bright and of Sir Benj. Brodie must be added.

Organic disease of the kidney sometimes leads to the suppression of its secretion, and this to comatose and other diseases; in other cases, such disease leads to albuminous urine and to dropsy.

Derangement of the stomach equally leads to derangement of the functions of the kidney, and to the deposit of various calculi, and their train of painful and dangerous effects.

In other instances, the function of the kidney becomes deranged independently of previous derangement of other organs, or of organic change in the kidney itself, but probably from hereditary predisposition, as in diabetes.

All diseases modify the secretion of the urine, from fever to those affections which must still be acknowledged as, and which are termed, nervous. The periods of digestion; each kind of diet, of beverage, and even of water; each change of the temperature and moisture of the atmosphere; has its effect upon the secretion of the kidney. Bodily exercise and certain mental emotions also have an obvious and immediate influence in diminishing or augmenting the secretion of urine.

It can no longer, therefore, be matter of surprise that nephritic affections are so frequent; and we have still to add to the list those which affect the bladder, the prostate, and the urethra, and the general mucous lining of the urinary organs.

All these are affections of one system, and one with the general system.

But no part of this subject is more important than the connection of urinary diseases with those of the brain. Diabetes, albuminous urine, &c., are equally liable to terminate in an affection of this central organ of the nervous system. It is, indeed, interesting to remark the influence,—1, of disease of one part of the urinary organs over the functions, and, ultimately, over the structure of others; 2, of diseases of the spinal marrow over the secretion of the kidney; and 3, of affection of the urinary secretion over the state of the brain. It will be my object, as usual, in this lecture, to disencumber the subject of useless, or almost useless, refinements, and to present to the young practitioner as simple and practical a view of the subject as possible.

I will now draw your attention to this table:—

I.—THE DISEASES OF THE KIDNEY AND URETER.

I.—THE ORGANIC.

I. Inflammation.
1. *Injection.*
2. *Enlargement.*
3. *Softening; Induration.*
4. *Suppuration.*
1. *Abscess.*
2. *Purulent Infiltration.*

II. Gravel and Calculus.
a. The Diathesis and kinds of Deposit and Gravel.
1. *The Lithic.*
2. *The Phosphatic.*
b. The different kinds of Calculus.

III. Granulated Kidney.
Effects:
1. *Albuminous Urine.*
2. *Dropsy; &c.*

IV. Organic Diseases.
1. *Cysts.*
2. *Encephalosis.*
3. *Tubercles.*
4. *Hydatids.*
5. *Matière Colloide.*

II.—THE FUNCTIONAL.

I. Suppression of Urine.
1. *Causes.*
2. *Effects.*

II. Diabetes.

III. Morbid Secretions.
1. *Albumen.*
2. *Excess of Urea.*

IV. Morbid Admixtures.
1. *Mucus.*
2. *Pus.*
3. *Blood.*

II.—THE DISEASES OF THE BLADDER, PROSTATE, and URETHRA.

I.—OF THE BLADDER.

I. Inflammation.
1. *Injection.*
2. *Ulceration.*

II. Calculus.

III. Nervous Affections.
a. Irritability.
1. *Immediate.*
2. *Sympathetic.*
b. Paralysis.

IV. Retention of Urine.

II.—OF THE PROSTATE.

I. Inflammation.
1. *Tenderness.*
2. *Enlargement.*
3. *Abscess.*

II. Calculus.

III.—OF THE URETHRA.

I. Stricture.
Effects.

II. Sympathetic Stricture.

I.—THE DISEASES OF THE KIDNEY AND URETER.

I.—THE ORGANIC.

I. *The History.*—The causes of nephritis may be constitutional, as gout or rheumatism; seated in the kidney itself, as calculus; external violence, as a fall, a blow; violent riding, or exposure to wet and cold, some medicines, as turpentine, &c. The attack of nephritis may be acute, insidious, or chronic; a frequent effect is the formation of a calculus; and, through its medium, gout and calculus are frequently connected.

II. *The Symptoms* are local pain and tenderness. These are felt on pressure, or percussion; or, if the patient makes a quick movement, or experiences a shock, as in making a false step in walking.

The examination is best made by placing the patient accurately on the back, and pressing the fingers between the short ribs and the ilium, the thumb being opposed to them upon the corresponding part of the abdomen: in this manner the kidney is really between the thumb and the fingers, and can be examined most distinctly, and sensibility and tumour are readily detected; if the patient be not in bed, pain and tenderness are frequently detected by percussion.

With these symptoms are usually conjoined fever, nausea and sickness, retching and vomiting, colicky pains, constipation; pain in the loins, extending into the iliac region, in fact, along the ureter; symptoms of irritation of the bladder or cervix; various morbid appearances of the urine, as deep colour, fœtor, deposites, mucous, puriform, sanguineous admixtures.

III. The *Organic Changes* in inflammation of the kidney are—

1. Injection;
2. Enlargement;
3. Softening, or induration;
4. Suppuration, assuming the forms of
1. Abscess,
2. Infiltration.

The Symptoms of abscess are rigors, fever, and perspiration, in irregular paroxysms, resembling intermittent or hectic. Mucous or puriform sediments are observed in the urine, which is frequently deep-coloured, and of an ammoniacal odour; and there is great irritation of the bladder and urethra.

Nephritic abscess may point and burst externally; or it may penetrate and open into the abdomen, and induce sudden, severe, and fatal peritonitis.

Nephritis, however, confined to one kidney at first, usually invades both in its course.

IV. *The Treatment* consists in general, but especially in local, bloodletting, repeated according to the degree and urgency of the symptoms: the mode of bloodletting already recommended may be adopted; the

result will teach us how to proceed. The cupping instrument should not be applied immediately over the kidney; but a little above and below, otherwise the mechanical injury does harm. The general or local remedy must be repeated according to its effect on the symptoms of the disease and the condition of the system.

Fomentations and poultices applied over the region of the kidney are extremely useful. Castor oil is the best aperient. The diet should consist of barley-water, or other mucilages. The warmth of bed, perfect quiet, and rest, are very essential.

II.—CALCULUS.

I. *The History.*—Calculus is frequently the cause, and as frequently an effect, of the disease last noticed; it is the latter especially when gout or rheumatism is the cause of nephritis.

But calculus is apt to be formed in the kidney, in the circumstances of those constitutional derangements which have been denominated the *calculous diathesis*, of which the principal are—

1. The Lithic.
   - *a.* With Yellow, Red, or Lateritious, or Pink Deposites of Lithate of Ammonia.
   - *b.* With the formation of Red Gravel, or Crystals of Uric or Lithic Acid.
2. The Phosphatic.
   - *a.* With the formation of White Gravel, or Crystals of Phosphate of Magnesia and Ammonia.
   - *b.* With the White Sediment of the mixed Phosphates of Magnesia and Ammonia, and of Lime.

1. The *first* of these is associated with high living, dyspepsia and gout; and is denoted by an acid state of the urine, readily detected by litmus paper, red, lateritious, or pink deposites of lithate of ammonia, and afterwards by the appearance of crystals of uric or lithic acid, or the red gravel. This diathesis prevails in childhood, and about the age of forty.

There is a constant disposition to change from the lithic to the phosphatic diathesis: the urine becomes pale; there is a disposition, from slight causes of disorder, to deposit mixed lithic and phosphatic sediments, or an iridescent pellicle of triple phosphate forms upon its surface. At length the urine becomes alkaline, and then there is disease of the kidney or bladder, and crystals of the triple phosphate of magnesia and ammonia are formed, constituting the white gravel.

Under the influence of these two diatheses the lithic acid calculus and the triple phosphate calculus are formed. But, besides these, there are two other kinds of diathesis and of calculus to be briefly noticed in this place:—

1. The crystals of the triple phosphate are apt to be changed for a pulverulent deposite of that phosphate mixed with the phosphate of lime; and the same mixture constitutes the fusible calculus. The constitutional and nephritic symptoms are extremely severe; the urine soon putrefies, with the evolution of ammonia. A fall upon the back, an injury done to any part of the urinary organs, may excite this diathesis and its effects; and all the other forms of calculous diathesis tend to pass into this.

2. The other form of diathesis is that in which the mulberry calculus, or that consisting of oxalate of lime, is formed.

II. *The Symptoms* of nephritic calculus, independent of inflammation, are excruciating pain in the region of the kidney and along the ureter; incessant nausea, vomiting and retching; pain and retraction of the testis; pain in the inside of the thigh; dysury; strangury. The urine is high-coloured; acid or alkaline; mixed with mucous, puriform, or sanguineous deposition.

The paroxysm is of various severity and duration: gravel or a small calculus may pass, with perfect relief; or there may be the transition from irritation into inflammation.

III. *The Varieties* of calculus may be thus enumerated and arranged for practical purposes:—

1. The Lithic or Uric Acid; or the Light-brown.
2. The Triple Phosphate of Magnesia and Ammonia; or the White.
3. The Mixed Phosphates of Magnesia and Ammonia, and of Lime; or the Fusible.
4. Oxalate of Lime; or the Mulberry.
5. The Alternating.

The last of these is the most interesting, in a pathological point of view: the mucus in such calculi is most frequently lithic acid, rarely the phosphates; these, on the contrary, generally form upon some nucleus, and are seldom covered by other depositions. Indeed, Dr. Prout has deduced, from his accurate observations, the following law upon this: "that a decided deposition of the mixed phosphates is not followed by other depositions." The tendency, in the diathesis, deposits, gravel, and calculous depositions, is always from the lithic to the phosphatic.

IV. *The Treatment* depends upon the diathesis.

1. The *lithic* acid diathesis, requires mild ant-acid remedies; potass, soda, and magnesia have been used principally; potass is to be preferred to soda, because its combinations with the lithic or uric acid are more soluble than soda; ten grains of the carbonate may be taken three or four times a day, until the deposits or symptoms disappear; the diet, should be of the mildest kind, and in moderate quantity.

2. The *phosphatic* diathesis, requires an opposite mode of treatment: mild acids, as very dilute muriatic acid; acidulous vege-

tables, as apples, oranges; a vegetable diet, are to be prescribed; watching the effect upon the urine and symptoms.

III.—GRANULATED KIDNEY.

I think it important to refer, once more, to the important researches and discoveries of Dr. Bright on this disease and its consequences: viz.—

1. Albuminous Urine.
2. Dropsy, &c.

IV.—ORGANIC DISEASE.

The principal organic diseases of the kidney are—

1. Encephalosis.
2. Scirrhus.
3. The Matière Colloide.
4. Cysts.
5. Hydatids.

The Symptoms consist in some degree of tenderness; in tumour; in various irritative effects upon the bladder and the acts of micturition; and in deranged appearances of the urine.

II.—THE FUNCTIONAL DISEASES.

I.—SUPPRESSION OF URINE.

I. *The History* involves that of some antecedent disease, of which this is, in truth, but a symptom, yet so serious and fatal a symptom as to deserve peculiar attention. That disease is inflammation, or calculus, with their effects, and perhaps any form of organic disease of the kidney.

II. *The Symptoms.*—The suppression may be partial or complete; its existence, its degree, and its distinction from retention, are determined, at once by the catheter.

From whatever cause it may arise, suppression of urine, if continued, speedily induces serious symptoms. There are fever, thirst, a taste of urine in mouth, and the smell of urine in the perspiration; to these, nausea, vomiting, sometimes of matters having a urinous odour, and hiccup, succeed; and to these, dyspnœa, delirium, and eventually coma, and convulsions.

Having ascertained the existence of suppression, the next point in the diagnosis, that which directs the mode of treatment, is the identification of the original disease. This is to be done upon the principles detailed in the former part of this lecture.

III. *The Morbid Anatomy* consists in those morbid changes which constitute the causes of this affection, and its effects, especially congestion, or effusion into the ventricles, of the brain.

IV. *The Treatment* is that of the original disease, and of the threatening affection of the head: local bloodletting, at the temples, and over the kidney, is the chief remedy; diuretics; aperients; mercury, are important auxiliaries.

III.—DIABETES.

I. *The History.*—This disease seems to be hereditary. Its accession is highly insidious, the first symptom which excites attention being the augmented secretion of urine.

II. *The Symptoms.*—The pathognomonic symptom of diabetes, is a saccharine state of the urine: the urine itself has a peculiar sweetish taste and smell; and, if dropped and dried upon linen or paper, it is glutinous and adheres to the fingers. There is urgent thirst, and the appetite for food is excessive; the mouth is clammy or parched, the tongue clean; the skin is harsh and dry, and without perspiration; the bowels constipated. There are pain and weakness across the loins; frequent micturition; diuresis; irritation of the orifice of the urethra; anaphrodisia. There are debility and emaciation; œdema; &c.

III. *The Complications.*—If these symptoms be not checked, there succeed—

1. Hectic;
2. Phthisis;
3. Dropsy;
4. Apoplexy.

IV. *The Morbid Anatomy* is still very imperfectly known.

V. *The Treatment* of diabetes is very imperfectly known: repeated small bloodlettings; a strictly animal diet; opium; the bichloride (oxymuriate) of mercury; have been recommended. Local bloodletting deserves a fair trial.

Here I would particularly draw your attention to a *table*, which I have drawn up and had printed expressly for your use (p. 469).

III.—MORBID SECRETIONS.

Dr. Prout describes the albuminous character of the urine as being of two kinds: the chylous and the serous; the former being far more frequent than the latter; but the mixed most frequent of all.

1. In the *Chylous* variety, the albumen is greater after meals. There is frequent micturition, and increased secretion or diuresis. There are craving for food, and other of the symptoms of diabetes.

2. The *Serous* variety of this affection seems to be connected with augmented action in the system: the urine is not only albuminous, but occasionally mingled with blood itself; it is, in such cases, frequently associated with dropsy, and apt to terminate in apoplexy.

Excess of Urea.

For the discovery of this form of disease we are indebted to Dr. Prout. There is diuresis, and the case has been termed diabetes insipidus. The urine is generally pale and without sediment, and is only characterised by the deposit of crystals of urea on the addition of nitric acid.

There is a constant desire to void urine, both by night and day; there is sometimes dull pain in the back; at others, occasional irritation at the neck of the bladder and along the urethra. There is no affection of the skin, or pulse, no thirst, or inordinate

TABLE OF DISEASES OF THE URINE.

CAUSES.				TREATMENT.
1. Errors in Diet. 2. Fatigue. 3. Dyspepsia. 4. Arthritis. 5. Dentition.	I. The *Lithic*. tend to	I. Diathesis.	Urine Acid, from the Super-lithate of Ammonia.	1. Wholesome Diet. 2. Mild Aperients, especially Rochelle Salt.
		II. Amorphous Deposit.	I. Lithate of Ammonia, frequently mixed with the II. Lithates of Soda and Lime.	3. Mild Mercurials.
		III. Crystals or Gravel.	Lithic Acid, nearly pure.	4. The Alkalies. 5. Magnesia.
		IV. Concretions or Calculi.*	I. The Lithic Acid. II. The Lithate of Ammonia.	6. The Gum Lancet.
	An intermediate Station is to be allotted to the Oxalate of Lime.	I. Diathesis. II. Amorphous Deposit, } very III. Crystals or Gravel, } rare. IV. Calculus.	Urine nearly natural. The Mulberry, or Hemp-seed.	1. Antiphlogistics. 2. Mild Aperients, *not* the Rochelle Salt. 3. Mild, wholesome Diet. 4. The Muriatic Acid. Dr. Prout.
1. Irritability } of the System. 2. Debility } 3. Sickly Childhood. 4. "Breaking-up" of the System. 5. Injuries of the Spine.	II. The Phosphatic. pass into	I. Diathesis.	Urine Alkaline and abounding in the Phosphates.	1. Strict Regimen. 2. Mild Aperients,—as Rhubarb. 3. Opium; Hyoscyamus, &c. 4. The Uva Ursi; the Alchemilla arvensis, &c. 5. Rhenish or French Wines; Cider, Perry, Lemonade, &c. *Avoiding*, 1. Alkalies. 2. Salts with a vegetable acid, as Rochelle Salt. 3. Mercury.
		II. Amorphous Deposits.	I. Triple Phosphate (of Magnesia and Ammonia), mixed with II. Phosphate of Lime.	
		III. Crystals or Gravel.	Triple Phosphate.	
		IV. Concretions or Calculi.*	I. The *Triple* Phosphate. II. The *Mixed* { 1. The Triple Phosphate with 2. Phosphate of Lime; } or the fusible Calculus	

* To these must be added,— I. The *Alternating*;
generally consisting of { A Lithic Acid, or Mulberry *Nucleus*;
An *External Crust* of the *Mixed* Phosphate.

II. The *Mixed*;
generally consisting of { The Lithate of Ammonia;
The Phosphates.

A special place is to be allotted to } The Prostatic Calculi. { These alone consist of Phosphate of Lime.

Lastly,—The Cystic Oxide; the Xanthic Oxide; the Carbonate of Lime; the Fibrine Calculi, are all extremely rare.

Principles dissolved in the Urine.	Urea in excess.	Diabetes insipidus;	Urine of high Specific Gravity.	Blood-letting. Mild Animal Diet. Opium. Dover's Powder. Warm Baths. Carbonate of Iron.
	Sugar.	Diabetes.	Urine profuse; sp. gr. very high; Saccharine.	
	Albumen.	Frequently Disease of the Kidney.	Urine coagulates by heat.	
Principles mixed with the Urine	Mucus.	Scanty when from the Kidney. Profuse when from the Bladder.		
	Pus. Blood.	From Calculus, or Disease of the Kidney or Bladder.		

appetite, or constipation. This affection seems, according to Dr. Prout, to be allied to those in which the urine is albuminous, or saccharine, or deposits the phosphates.

IV.—MORBID ADMIXTURES.

The morbid admixtures with the urine are—

1. Mucus,
2. Pus, or
3. Blood.

They must be regarded merely as symptoms, and denote inflammation, or irritation, of the

1. Kidney,
2. Bladder, or
3. Prostate.

The source of these admixtures with the urine is determined by the other symptoms in the first two cases, and by a careful examination in the third. If the symptoms be principally nephritic, and the blood be diffused through the urine, the kidney is the probable seat of the morbid secretion or effusion; if vesical, with the discharge of blood only partially mixed with the urine, and towards the end of micturition, the bladder is probably that source.

But, besides these cases, hæmaturia occurs in some other circumstances: it is frequent, for instance, in—

1. Typhus,
2. Purpura.
3. Scorbutus.

In one case the patient discharged large quantities of dark-coloured blood, perfectly mingled with the urine, on every exposure to cold; the flow was as certainly arrested by the genial influence of warmth.

II.—DISEASES OF THE BLADDER, PROSTATE, AND URETHRA.

I.—OF THE BLADDER.

I.— INFLAMMATION.

I. Acute inflammation of the bladder is rare. The repulsion of gonorrhœa sometimes induces this disease, as, in other instances, it excites inflammation of the prostate, or of the testis. Chronic inflammation of the bladder may arise from—

1. Stricture of the Urethra.
2. Disease of the Prostate.

II. *The Symptoms* are a frequent desire to void urine, even when the bladder is empty, or strangury; and pain in the region of the bladder, especially on or after micturition. There is fever, with a frequent pulse, and a furred tongue. The urine deposits a mucous sediment, suggesting the designation *catarrhus vesicæ;* it adheres to the vessel, and is alkaline.

III. *The Morbid Anatomy* consists in redness and dark colour, and thickening of the mucous membrane, sometimes extending along the ureters and to the pelves of the kidneys, which are apt to be dilated, and to the substance of these organs, which are then enlarged, and perhaps become the seat of abscess or other disease. The internal membrane of the bladder is sometimes ulcerated. The bladder is sometimes perforated like the stomach, and the urine flows into the cavity of the peritoneum, or through a fistula into the rectum, or by an external opening.

IV. *The Treatment.*—In the acute form of this disease, local bloodletting, fomentations and cataplasms, and a diet and beverage restrained to linseed-tea; the warmth and quiet of bed; the pulvis antimonialis; the oleum ricini; and warm water enemata; are the principal remedies. In the chronic form, the uva ursi, the pareira brava, the buchu, have been added with advantage.

II.—CALCULUS.

I. *The History.*—Vesical calculi may be viewed in two points of light: that of

1. The Nucleus.
2. The Exterior Portion.

The most common nucleus is a nephritic calculus, which has passed through the ureter. But any foreign substance introduced into the bladder may become the nucleus of calculus; thus a hazel nut, a portion of a bougie, has formed the centre of calculous deposition. The exterior portion is most frequently the triple phosphate, or the mixed phosphates. The phosphates are frequently deposited by the influence of the alkaline mucus of the bladder, when this is very abundant, mingling with the urine.

II. *The Symptoms* vary in intensity exceedingly, according to—

1. The Size and Surface of the Calculus;
2. The Condition of the Bladder;
3. The Condition of the Urine.

It is obvious that a small, smooth calculus must induce less uneasiness than one that is rough and large; the same calculus will induce very different effects upon a healthy and upon an inflamed vesical surface; acid, and especially alkaline urine, adds another source of irritation to that of calculus itself.

1. In the milder forms of the disease, there is a slightly increased desire to make water, and this act is followed by slight irritation of the cervix, or along the urethra; the flow of urine is sometimes suddenly stopped, the calculus closing the orifice of the urethra; the urine is apt to be bloody after riding or other shaking exercise.

2. In the severe forms of calculus, the calls to make water become sudden, frequent, urgent, and irresistible, and liable to be induced by any change of position. There is a characteristic sympathetic pain, on voiding urine, at the termination of the urethra and glans penis. There is pain in the region of the bladder, in the groins, &c.

The symptoms are aggravated still further as the calculus enlarges, as the bladder inflames, and as the urine becomes alkaline.

The desire to make water becomes urgent and incessant; the pains are extremely augmented, and the urine becomes ammoniacal, mucous, and sanguineous. There is sometimes spasmodic stricture of the urethra.

These symptoms, and indeed any one or more of them, will lead to the use of the sound, by which alone the existence of calculus is rendered certain, and its size and character are, in some degree, ascertained. If the calculus be of recent formation, and the urine acid, we have further reason to conclude that it consists of lithic acid; if, on the contrary, the symptoms have existed long and are severe, and the urine is alkaline, we may conclude that the phosphates have begun to be deposited.

III. *The Morbid Anatomy* of calculus relates principally to—

1. The Bladder itself;
2. The Kidney;
3. The Prostate.

1. There are the usual appearances of inflammation in the mucous membrane of the bladder.

2. The pelvis of the kidney and the ureter are frequently augmented in size, and the kidney itself suffers variously from inflammation and other morbid changes.

3. The prostate is sometimes enlarged; in a few cases it has become ulcerated, and then the sufferings of the patient are extreme.

IV. *The Treatment* in these cases comprises that of calculus and that of inflammation combined; in addition to which opiates and opiate enemata must be administered for pain, with warmth, rest, and quiet.

III.—NERVOUS AFFECTIONS.

1. *Irritability.*

In some cases there is an irritability of the bladder which is entirely mental; the attention is directed to this organ, and the necessity of emptying it, however imaginary, becomes imperative; it is repeated; it becomes constant. The patient cannot travel, cannot visit, on account of this mental irritability in regard to the bladder.

In other instances the urine becomes acid or alkaline; the bladder is unusually stimulated, and becomes irritable.

Irritability of the bladder occurs in nervous patients, and in old persons, without disease.

Irritability of the bladder is not unfrequently a sympathetic affection in

Disease of the Kidneys.

2. *Paralysis.*

Paralysis of the bladder occurs from disease or injury of the brain and spinal marrow; in typhus; in the sinking state; in old age. It leads to—

IV.—RETENTION OF URINE.

When retention occurs from paralysis, it is very frequently accompanied by incontinence of urine, the cervix as well as the body of the bladder being affected. The region of the bladder should be carefully examined, and the catheter should be passed. Retention may also arise from—

1. Stricture.
2. Disease of the Prostate, &c.

II.—DISEASES OF THE PROSTATE.

1.—INFLAMMATION.

1. Acute.
   1. Swelling.
   2. Abscess.
2. Chronic.

I. *The History.*—In the young, the prostate is sometimes the seat of acute inflammation, with or without the repulsion of gonorrhœa. In the old, the gland becomes the seat of chronic inflammation.

1. *The Acute.*

II. *The Symptoms* of the acute inflammation of the prostate, are pain and uneasiness, and a sense of fulness, at the cervix vesicæ, in the perineum, and in the rectum; frequent desire to void the bladder, with more or less of obstruction, strangury, and tenesmus. There is distinct tenderness on pressure by the finger introduced into the rectum, with some enlargement; the bougie determines the absence of stricture.

If abscess forms, these symptoms continue; the tenderness and swelling increase, and at length the abscess opens externally, into the urethra, &c. Meantime the dysury increases, with perpetual calls to make water, and there are rigors, fever, quickened pulse, hot skin, furred tongue, &c. With this affection there is frequently extensive

Disorganisation of the Kidneys.

2. *The Chronic.*

III. *The Symptoms* in chronic enlargement of the prostate are, irritability of the bladder, and some obstruction to the passage of the urine through the urethra. There are frequent calls to void urine, and some difficulty in doing so, and it perhaps dribbles away, especially during sleep, and is, at best, but imperfectly expelled. From various causes, the symptoms may be aggravated, and the difficulty of passing urine becomes extreme, or there is complete retention. In extreme cases, the vesical mucous membrane may slough; the powers of life fail, the tongue becomes dry and black, and there is complete, and fatal, coma.

V. The following *Complications* of this disease are apt to take place:—

1. Abscess or Ulceration of the Prostate.
2. Inflammation of the Bladder.
3. The formation of Vesical, or Prostatic, Calculi.
4. Disease of the Kidney.

These affections seem to be sometimes continuous from, at others, excited by, the disease of the prostate. The urine may be

augmented or diminished in quantity, suppressed or retained, with the usual formidable or fatal symptoms. The bladder is very often marked by hypertrophy of the muscular fibres.

IV. *The Treatment* consists in local bloodletting, opiate and warm water enemata, &c. It is, indeed, nearly the same as that for cystitis, or calculus.

II.—CALCULI.

Calculi of the prostate produce similar symptoms. They are sometimes detected on examination with the finger or sound; sometimes fragments are discharged, and they are identified by their chemical composition, which consists principally of phosphate of lime, with animal matter.

III.—DISEASES OF THE URETHRA.

I.—STRICTURE.

Stricture may be suspected whenever there is difficulty in passing the urine, and this flows in a diminished, flattened, spiral, or split stream; it is ascertained, with its situation and extent, by means of the bougie, &c.

The principal *Effects* of stricture are—

1. Irritability of the Bladder.
2. Retention of Urine.
3. Abscess in Perinæo.
4. Dilatation of the Urethra.
5. Disease of the Prostate.
6. Inflammation of the Bladder.
7. Hypertrophy of the Muscular Coat of the Bladder.
8. Disease of the Kidneys.
9. Disease of the Testis.

II.—SPASMODIC STRICTURE.

This affection may take place from exposure to cold, excess in wine, &c. There is difficulty or inability of micturition. This comes on suddenly, and sometimes goes off under the influence of sudorific and anodyne remedies. By repeated returns it may lead to permanent stricture.

In this lecture I have, as usual, presented you with a practical view of my subject; in my next I shall bring before you that of the diseases of the uterine system.

MORTALITY IN PHILADELPHIA FOR 1837.—The deaths in the City and Liberties of Philadelphia, during the year 1837, were 5202, of whom 2755 were males, and 2447 females. There are reported as having died from consumption of the lungs 748, nearly one-sixth of the whole number. Allowing for inaccuracy of report, and the probability that many diseases of the lungs not tuberculous are included under this head, the preponderance is still overwhelming, when we see the next highest in the list, convulsions, only 294. From scarlet fever 205 deaths occurred, from small pox 79, from measles 49, from varioloid only 2.—*Med. Examiner.*

LECTURES
ON
MATERIA MEDICA AND THERAPEUTICS:
NOW IN COURSE OF DELIVERY
AT THE
WINDMILL-STREET SCHOOL OF MEDICINE
BY
GEORGE G. SIGMOND, M.D.

Precautions to be used in the use of purgatives. Disadvantages of long-continued cathartic medicines. Rules for the administration of these medicines in various diseases. Remote effects of purgative remedies; their action assisted by bleeding. General rules for administering cathartics. Rhubarb, its history and properties. Three species of rhubarb. English rhubarb. Analysis of the drug. Preparations made from it. Objections against the use of rhubarb answered.

GENTLEMEN:—After having, in my former lecture, so fully entered into a view of the advantages to be derived from the action of purgative medicines, when employed under judicious medical care, it is but right to point out to you some of the circumstances which render this plan of treatment not only useless, but even prejudicial; as I have shown you, too, the necessity of attending to a proper state of the bowels under the ordinary habits of life, so must I warn you against persevering too long in the employment of purgatives, when the causes that demanded their exhibition have ceased. There is very little doubt that the system of purging is occasionally carried too far; and although the exaggerated statements of Broussais, and the French school that heard him, have rather tended to lessen the evil, still there is little doubt that mischief has followed upon keeping up a constant drain upon the alimentary canal. It has been very sagaciously observed that the public are naturally fond of the doctrines of the humoral pathologists, and that they are most willing to believe that by active purging there is carried off a great deal of poisonous matter, which would enter the system and overpower it. When a medical man is called in who is an advocate for the purging system, they generally soon fall into his way of thinking; they have a sort of gratification in discharging a large quantity of nasty-looking greenish or black stuff, and if the excretion be attended with any marked fetid odour, they feel a sort of self-complacency, they fancy they have discharged a mass of corruption, and they are very far from being indisposed to the advice of the learned doctor who recommends them another dose of blue pill and a draught; they say they are quite ready for it; they are quite pleased at the idea of another disgorgement, and can-

not resist the gratification of making another attack upon the enemy, who, they fancy, must very speedily collect his forces. They voraciously swallow the doctor's stuff, and, as they say, they find themselves lighter and their appetite improve. They are very much pleased with what has been done for them; and, indeed, were they then to rest contented all would be well, but they fancy they have discovered the means of attaining lasting health; they therefore give way to the pleasures of the table, quite satisfied with the idea that they know how to get rid of any accumulation that may occur, and fancying they are perfectly capable of taking care of themselves, probably once or twice in the course of every week they swallow some drastic purgative, either quite ignorant of what they are employing, or from having found, under the hands of the doctor, such relief from calomel or blue pill, they take a fixed dose of one or other of these. Sometimes, after dinner, a kind friend recommends his own pill, from a prescription he had from Abernethy, or Baillie, or the fashionable dyspeptic doctor of the day, which he declares he has used twice a week for the last five years, and never known an ach or pain since; his greedy auditor swallows the tale, and afterwards the physic, whose composition may be completely opposed to his state; he goes on with it week after week, disordering his bowels, expelling the natural mucus, urging on the canal to increased action, till at last his stomach and the whole digestive apparatus becomes really impaired. He then goes from physician to physician, all over London, each giving him a prescription for a tonic, a stimulant, or a bitter; at length a permanent irritation is kept up, the whole system sympathizes with the state of the alimentary canal, the mind is peevish and irritable, the viscera become deranged, and, at last, the poor sufferer falls a victim to the early benefit which he had received from the proper administration of medicine, and then its abuse. I can trace the illness, nay even the death, of many a most worthy member of society to this love of tampering with medicine, which commenced with the greatest relief having been derived from purging the bowels at a proper period, but which benefit had been converted into an actual evil, from the persevering in a course of remedies which were not required; and you will constantly find men of very great natural sense gradually quacking themselves to death by calomel and blue pill, which they have taken to under completely erroneous impressions. I should almost be inclined, from the deplorable mischiefs that have followed, to make a legislative enactment against the sale of pills of blue pill and calomel without a medical man's order.

You must remember that the unnatural colour, and the fetid odour of the stools are quite as often produced by the medicine that has been exhibited as by any other cause. How often does calomel give rise to the very odour which some persons think is a proof that medicine is to be continued; the slimy stools of children which are often the cause of purging being carried on to a very great extent, are, in many instances, the consequence of what has been given. As long as you are giving your remedial agent you can neither expect the fœcal residue to acquire its wonted solid consistence, nor to give forth the usual smell which is acquired from its remaining in a certain portion of the large intestines. It is but, comparatively speaking, from a limited surface that the mixed odour is acquired, and there is a very great difference between that which is caused by the secretion from the liver, and that by the lower portion of the intestinal canal. The offensiveness of the fœcal evacuation, though it may guide the practitioner as to the particular viscus which is disordered, cannot serve as any assistant by which you may ascertain whether more action is required. This subject is involved in some obscurity, from the unwillingness of writers to enter upon points which are by no means agreeable to the general taste of society. Dr. Hamilton is the only one who has at all ventured to show the necessity of the regular and accurate examination of every alvine evacuation, but he, like every enthusiast, rode his hobby a little more hardly than was at all required. To those who remember him in the wards of the Edinburgh Hospital, there always appeared somewhat of the ridiculous in his manner of investigation of the carefully-preserved utensils; but his conjectures with regard to the actual ailment which he supposed these exhibited, were very often perfectly correct; his diagnosis was generally founded upon this, but I have not found any of those who followed his system, who have placed any great faith in the power of regulating the dose, of determining the frequency of the repetition, or of judging which particular remedy should be had recourse to. Although in many diseases of infancy and of childhood this class of medicines is certainly useful, yet it should ever be borne in mind that with the excrementitious matter there may be very often carried away that which nature has, with some difficulty, elaborated for nutrition; and in weak, sickly children, having a tendency to scrofula, it not unfrequently happens that the food which was intended to be imbibed is just carried away at the moment when the glands most require something to store up for future nourishment; the torpid action of the alimentary canal is only to be got rid of by gently stimulating; there ought only to be moderate solicitation of the alvine contents. Of the frequency with which diarrhœa, dysentery, acute pains of the bowels, and high gastric irritation, super-

vene upon purging, I shall here say nothing; they, however, are to borne in mind, and it must be recollected more particularly where it is necessary to use these remedies in hot climates. Under ordinary circumstances, in chronic disorders, it is requisite daily to obtain one copious, fœculent, soft, yellowish motion from the bowels; liquid stools are unnecessary, sometimes are hurtful; this should occur, if possible, shortly after the first morning meal, though there are cases in which from affections of the rectum, of the kidneys, of the bladder, it ought to be obtained just previous to the individual retiring to rest; for it often happens that a horizontal position after the evacuation of the bowels is indispensably necessary. In acute diseases it is often very requisite to keep up for a succession of days an active excretion from the whole surface of the canal, and for this purpose a mixture of the various remedies is required, so that an influence may be extended to each part, and every organ more or less called into exertion; it is surprising how soon a well directed action upon the various parts produces its influence upon the vascular and upon the muscular system; how soon inflammation may be controlled, a plethoric state removed, or an inordinate determination to the organs or tissues checked: but all this requires study as to the theory of their mode of operation, and actual experience to determine the line of treatment best to be pursued.

The judicious management of purgative medicines will always be found most materially to alleviate the disorders of the system, to control inflammation, and to restore the functions of the animal economy to their state of health and of vigour; and the art of combining these remedies with others of great importance must be acquired by observation and by experience. It is not upon the increase of the peristaltic action of the bowels that their valuable operation alone depends, it is upon their exciting the salivary, the gastric, the biliary, the pancreatic, the mucous secretions, and upon their aiding the functions of the digestive, the chylopoietic, the nutrient, and the imbibing organs; and, indeed, every action of life may most materially be influenced by their power.

Bleeding sometimes assists the action of purgative medicines, when we judge from the hardness and frequency of arterial action that inordinate tension is present, and that inflammation may be likely to supervene. Cold upon the abdominal region, friction over its surface, will aid in giving a stimulus to their operation. Injections into the rectum may render them more speedily operative. The union of different articles possessing purgative powers is oftentimes a matter of great importance; and whilst the adding together a large variety of purgative medicines must be avoided, still, by a proper adjustment of these remedies, each known to have its own peculiar influence, great power is placed in the hands of the skilful medical man.

The observations made by Hippocrates, of their effects upon diseases of the lungs, it has been said, have not been acknowledged generally, though they have been appreciated by all the observers of disease. We have had no examination of the therapeutic powers of different agents in pulmonic disease, though the labours of so many distinguished men, both in this country and on the Continent, have been directed to the diagnosis of the various changes that occur. Hippocrates has said, "It is a very curious fact, but one fully confirmed by experience, that urged to any extent evacuations from the bowels are found in the complaints of the lungs always mischievous, and in some cases so injurious as to be wholly inadmissible. Even in pleurisy we cannot purge with the same freedom as in other cases of acute inflammation. But in the chronic pneumonic affections, and especially in pulmonary consumption, the system immediately sinks under the operation of purgatives, and hence we are so careful to restrain diarrhœa in this disease."

There are certain general rules with regard to the administration of these medicines, besides those which may have more immediate reference to each particular one. It is generally advisable to commence with small doses, and to be aware of the fact, that with the exception of the neutral salts, they lose their power by frequent repetition. A combination frequently is more effectual than any one singly, but such articles are to be selected as operate upon each portion of the great canal, on which an impression is to be produced; always avoid using large doses of drastic cathartics alone, for then they violently gripe, harass, and injure the bowels, sometimes leaving behind an impression which exists for some considerable length of time.

When the stomach is to be more immediately the viscus to be acted on (as by the administration of rhubarb, of magnesia), the morning is the best time; when the lower bowels, at the hour of retiring to rest; and this is generally the time at which blue pill, calomel, or any agent upon the liver, is likewise best exhibited. It is true that it is not possible to speak with decided precision, or to give a satisfactory account of the action of each of the purgatives we possess, though we can of the greater number, and the difficulty is to distinguish precisely, as Dr. Hamilton has observed, on those which act more particularly on the smaller, and those whose influence is exerted on the larger intestines. In many diseases it is the steady and uniform exhibition of these medicines, in full and

decided doses, that produces the effect required.

Sir Anthony Carlisle has justly observed, that the use of purgative medicines is often requisite to an amazing extent. "Febrile and inflammatory affections, whether arising from constitutional or local causes, it is observed, are never relieved until the bowels are freely disgorged, and to effect this a reiterated purgation is absolutely necessary, the only proper criterion being a perfectly flaccid, soft, and compressible state of the abdomen. It is, indeed, astonishing how great a length of time substances may remain in the bowels; as a case in point I may relate the cook of the late Duke of Portland, who had a very extensive gangrene of the leg; he was a man of full habit, and I treated him, as I often do such persons, with success, both in cases of gangrene and carbuncle, with free purgation; although, in the course of four days, he had, I think, about seventy stools, yet after this I was surprised to find in the evacuations some carraway seeds, which he had eaten more than a week previously."

RHEUM—RHUBARB.

The rhubarb of commerce is, I believe, obtained from several species of a family which has been classed under the order polygoneæ, but the best is obtained from the palmatum. It was Boerhaave who first ascertained that the Russian rhubarb was produced by this species; he procured from a Tartarian rhubarb merchant the seeds of the plants which yielded the roots he annually sold, and which were admitted at St. Petersburgh as the real rhubarb; these seeds on being sown, produced two distinct species, the undulatum and the palmatum.

The name rheum, notwithstanding the opinion of Linnæus, that it was derived from the Greek ῥεω, from its causing a downward flux, is a sort of Latinising of the word Rha, a river now called the Volga, on whose banks the rhubarb grows; and Ammianus Marcellianus observes, that the Rha is a river on whose borders grows a root highly esteemed in medicine. The species, which is officinal, is distinguished by the large palmated leaves, which are acuminated, and somewhat rugged. The root is perennial, thick, of an oval shape, and sends off long tapering branches; externally, it is brown, internally, of a deep yellow colour; stem erect, round, hollow, jointed, sheathed, slightly scored, branched towards the top, from six to eight feet high.

It has been observed that this species cannot be mistaken, if attention be paid to its superior height, the ferruginous, or reddish-brown colour of the stem, branches, and petioles, the palmate form of the leaves, and the elegant looseness of the little panicles of greenish-white flowers. These flowers, which appear early in May and June, are small, white, numerous, surrounding the stem, and collected at the extremity of the branch, forming a sort of spike. The perianth is divided into six obtuse segments; the filaments are nine, the length of the sepals, and support oblong anthers; the style is short, with three reflected stigmas. The ovary becomes a triangular-pointed nut, with membranaceous margins.

We have lately had some valuable information given to us by Professor Don, on the rhubarb of commerce; he tells us that Mr. Sievers, an enterprising assistant of Professor Pallas, was sent by the Empress Catharine purposely to try to obtain the true rhubarb plant from its native country; and although, after travelling for seven years in the countries adjacent to that in which it is found, he was unable to effect the object of his mission, yet he obtained sufficient information to convince him that the plant was then unknown to botanists. It was, however, reserved for Dr. Wallich, the zealous superintendent of the Calcutta Botanic Gardens, to set this long agitated question at rest, by the transmission of seeds, and dried specimens of the true rhubarb plant to Europe. Mr. Colebrooke received a quantity of ripe seeds from Dr. Wallich, and presented a portion of them to Mr. Lambert, who has been so fortunate as to raise a number of plants of this valuable vegetable. The seeds were sown in pots, and by the aid of artificial heat soon vegetated. The young seedlings were transplanted into several pots filled with rich earth, and the pots were gradually changed as the plants increased in size. By this treatment the young plants grew vigorously, and at the end of autumn the leaves were from fifteen inches to a foot in breadth, and the footstalks nine inches long, with half an inch in diameter. The plant, on examination, proved to be identical with the one described by Professor Don, under the name of rheum australe, from Gosacugsthan, in the Himalaya Alps. The plant is beset with numerous small, bristle-shaped, cartilaginous points, which give it a rough feel. The leaves are of a dull green, and the footstalks are red, and deeply furrowed.

The rheum australe, or the rheum emodi, as Dr. Wallich has called it, appears to be peculiar to the great table lands of central Asia, between the latitudes of 31 and 40, where it is found to flourish at an elevation of eleven thousand feet above the level of the sea, and therefore there is little doubt of its proving perfectly hardy in this country. Large quantities of the roots are annually collected for exportation in the Chinese provinces, within the lofty range of the Himalaya. The common rheum rhaponticum, a native of Syria, was introduced into this country about 1629. Dr. Lister having obtained some seeds, which he gave to Parkinson, they were sown, but the roots which

sprung up were found of a very inferior quality.

There are three sorts of rhubarb to be found in the shops, which are generally believed to be the produce of the rheum undulatum and the rheum palmatum. Two of these, the Russian and the Turkey, resemble each other in most respects, but one comes to us through the Petersburgh market, and is very carefully selected, and is even considered worthy the attention of the Government, which has directed that at the frontier town at which it arrives from Tartary, called Kiachta, it should be most carefully sorted, and inferior articles thrown away.

In St. Petersburgh the watchfulness is very praiseworthy, and there are immense depots where this important article of commerce undergoes another scrutiny. That which we call Turkey comes from nearly the same part of Tartary, but as it reaches us through Turkey, or through Smyrna, it is known to us by the name of Turkey rhubarb. It evidently has had less attention paid to it, and is, generally speaking, less prized. Rheum palmatum has been cultivated in this country, and great attention has been paid to the circumstances under which its vegetation might best be managed. From the neighbourhood of Banbury there comes into the London market some of a very excellent quality. The specimens bear a very strong resemblance to the Turkey rhubarb, but it is not uncommon to find them designated as East Indian. It has been said that some of our druggists are in the habit of mixing this with the better class of rhubarb, and selling the compound under the title of fine Turkey rhubarb; the recipe that has been given for this is twenty pounds of English rhubarb, seven pounds of East India, three of Turkey; these are directed to be ground together, and a very striking yellow powder is produced; and I have heard some very high authorities in favour of this mixture.

It is a well known fact, that fashionable druggists are obliged to gratify the eye of an elegant customer, and many a fine lady would not take rhubarb if the colour did not come up to the precise standard of her inclinations. The English rhubarb seldom pinches, and has been found a very useful purgative. Dr. Parry tried it at the Bath Hospital, and was much pleased with some of the specimens. The Society for the Encouragement of Arts, Manufactures, and Commerce, has done much towards promoting the culture of this drug in this country, and has at different periods bestowed its medals upon many individuals who have deserved well for their enterprise and skill.

In the Medical Botany, published by Stephenson and Churchill, you will find some very interesting extracts from the Transactions of the Society, with a general view of the mode of growth, and of the various plans for the management, which were carried into effect by Mr. Davis, Mr. Jones, by Sir William Fordyce, and others; they arrive at the conclusion that if English rhubarb should be allowed to be inferior to the foreign, which is perhaps doubtful, that this inferiority is owing to such circumstances as industry and attention might obviate, and that this might be done, in a great measure, by attending to the age of the plant when taken up, to the root being cut transversely, rasped on the outside, and having the sappy parts cut out, and then being quickly dried. An article in Miller's "Gardener's Dictionary," from the pen of the late Professor Martyn, has been considered the best, and has been referred to for the correctness of its information.

The best rhubarb is in the form of roundish masses, of a lively yellow colour, through which there are streaks of white and red; these seem to be little cells, in which are deposited the peculiar principle upon which the active property depends, for if a root be long macerated in warm water, the whole of the colouring and active matter is taken up by the fluid, and there remains only the mass, having a singular honeycomb appearance. Water takes up by far the largest proportion of the principle upon which the activity of the medicine depends, and there remains a woody fibre. Pfaff has given the name of rhubarbarin to this principle, which Nani, of Milan, regards as a vegetable alkali, but which we have no reason to believe to be such. Vauden obtained a substance to which he gave the name of rhein, by gently heating rhubarb in powder, with eight times its weight of nitric acid, evaporating to the consistence of syrup, and diluting with cold water. This may be extracted from rhubarb by ether, so that it exists ready formed in the plant.

From 100 parts of the finest Turkey rhubarb the ingredients obtained were of—

Water	8.2
Gum	31.0
Resin	10
Extract tannin and gallic acid	26
Phosphate of lime	2
Malate of lime	6.5
Woody fibre	16.3
	100

Rhubarb produces different effects, according to the dose in which it may have been administered, and according to the particular circumstances which have attended its employment. In a small quantity, that is in less than eight grains, it acts as an admirable stomachic; it gives tone strength, and digestive power to the stomach, gently stimulating the muscular fibre, and assisting it to expel whatever contents may be in it, propelling them towards

the œsophagus. It seems to be principally on the muscular tissue that its influence is exhibited, for there is very little evidence of its exciting secretion. If taken in a larger dose the influence is quickly conveyed to the intestinal canal, so that the peristaltic action throughout its whole length is soon increased. It is evidently rapidly imbibed by the stomach, and that this is the case is shown by the rapidity with which it is conveyed into the urinary secretion, whose colour it very quickly tinges. Even ten minutes after a dose of rhubarb has been swallowed, some portion of it may be discovered in the urine; it is also attempted to be carried off by the skin; and instances have occurred where the linen has been deeply tinged by the perspiration, and rendered of a saffron-yellow colour by it; and this has occurred more particularly towards the termination of exanthematous fevers, and in some instances has been the cause of considerable alarm, from the unexpected appearance that has been presented. The powder of rhubarb and its tincture have long been used as an agreeable stomachic, admirably adapted to give tone to the strength in old age, and the practice of chewing some rhubarb root a short time before dinner, has been followed by individuals for a long series of years with very great advantage. The stomach, however, is very apt to become habituated to the long use of the remedy, and at last it ceases altogether to produce any peculiar effect.

The compound tincture of rhubarb of the London Pharmacopœia is a very valuable preparation, and has been known from a very early period by many different names; it is one of the most useful additions that can be made to infusions of senna, to decoctions of aloes, or to any of the purgative medicines, for it is very grateful to the stomach, imparts a warmth, and assists very materially the action of other remedies. It is directed to be prepared by taking of rhubarb root, sliced, two ounces and a half; liquorice, bruised, six drachms; ginger, sliced, saffron, of each three drachms; proof spirit, two pints; macerate for fourteen days, and filter.

The Edinburgh College has two formulæ of much value in the same way; the one formed by a combination of rhubarb root and of socotrine aloes; the other by digesting together, for seven days, two ounces of rhubarb root, sliced, and half an ounce of sliced gentian root. All these preparations were much greater favourites than they now are. The system of stimulating by tinctures, more particularly in early life, and amongst delicate females, has long been superseded by the use of cold infusions, and of the neutral salts, which are now rendered so much more palatable than they formerly were, that they are generally preferred. The authors of the last century constantly prescribed these tinctures as much more grateful, and much less likely to produce the nausea and vomiting which were the consequences of the ill-managed preparations of salts. A few years since such an elegant preparation as the Seidlitz powder was quite unknown, and the more stimulating tinctures were considered to be quite the proper medicine to administer; they have, however, had their day not to return.

One of the objections to be urged against the employment of rhubarb is, that it leaves the bowels, after its action, in a very confined state, for a great length of time. Constipation of some days has been known to follow upon it, and the larger dose the more likely is this to occur; but if there be a mixture with other cathartics this is not the case, more particularly if they belong to the neutral salts. Few medicines are better formed together in a great number of complaints than the supertartrate of potash, or cream of tartar and rhubarb; with jalap, too, it acts remarkably well; its use is very striking in increasing the peristaltic motion, where other agents have produced their effect by increasing the secretions; thus, combined with calomel, in diseased states, in which the liver is torpid, it is remarkably successful. It has long been recommended in spasmodic colic, and in some of those cases which suddenly come on, after a hot day, in the country, where too cold drink has been taken, so that perspiration has been checked; the tincture of rhubarb, with a small quantity of laudanum, acts like a charm. In diarrhœa, which has been caused by the presence of some offending matter in the intestinal canal, it is, in various points of view, very serviceable; it first causes the due evacuation, and leaves behind it that degree of astringency which keeps the bowels less active, and then gradually a healthy state is restored. It is a very good medicine, in small doses, for children; it should be given, however, to the mother, when it is wished to produce any influence upon the infant, for sometimes it has been known to cause convulsions, griping, and great uneasiness. It is singular how very rapidly the mother's milk acquires the astringent and bitter taste of the drug, and how very sensible the infant is to the change. Externally the powder of rhubarb has been employed by Sir Everard Home, and other surgeons, as a powder to ulcers which require to be stimulated. It has been employed as an endermic medicament with some degree of success, for it seems to be absorbed into the system with very singular facility.

Bradner Stuart, it appears, from what has been stated by Dr. Anthony Todd Thomson, affirms, that it can be detected in the urine, after using a bath impregnated by it. You will find in the "Londin Dispen-

satory" a table drawn up by the latter of these gentlemen, exhibiting the precipitates formed by acids, alkalies, and neutral salts, upon the Russian and Chinese varieties of rhubarb, and likewise another of the precipitates formed by solutions of metallic salts. His experiments lead him to the conclusion that rhubarb contains a large proportion of extractive matter, a very small proportion of resin, mucus, tannin, or rather a principle analogous to it, gallic acid, a colouring matter, much oxalate of lime, and minute proportions of alumen and silex. The compound rhubarb pill of our Pharmacopœia is a very good medicine, and ten grains form a useful aperient. It is made of an ounce of powdered rhubarb, six drachms of powdered aloes, half an ounce of powdered myrrh, soap, a drachm, oil of carraway, half a fluid drachm, syrup, as much as is sufficient; the whole of this is to be incorporated into a mass for use.

PERFORATION OF THE STOMACH. PERITONITIS. ABSENCE OF THE OVARIES.

To the Editor of THE LANCET.

SIR:—If you deem the following case worthy of a place in your periodical, you will, by inserting it, oblige yours very truly,

FREDERICK CRIPPS.

113, Dale-street, Liverpool,
June, 1838.

A few days since, about eight, A.M., I was sent for to see a young woman, ætat. 18. I learnt that on the previous evening, after eating a hearty supper, consisting of beef and potatoes (of which four other persons in the family had also partaken), she was seized with severe vomiting, and a "violent pain at her stomach." During the day she had complained to her mistress of "stitches in her side," but continued at her housework as usual, and appeared in excellent spirits. To relieve the pain half a glass of brandy and a tea-spoonful of ether had been given, and warm salt applied. After this she felt somewhat better, and the vomiting subsided. She slept none during the night. At five on the following morning she walked home with her mother, a distance of nearly a quarter of a mile; she immediately went to bed. The pain in the stomach now began to increase, and at the time before mentioned I first saw her. I found her lying on her back, her knees drawn up; face expressive of great agony. She had no pain in her head, but a peculiar dizziness about her eyes; no cough, or pain in her chest; great tumidity in the abdomen, which was extremely tender on pressure. Pulse 138, and small; skin harsh and dry; tongue furred in the middle, but not at the edges; considerable thirst; drank cold water incessantly; sickness entirely abated; bowels not relieved since yesterday morning.

Bleeding to ℥xx.; leeches to abdomen; calomel and opium in pills every three hours; enema of castor-oil in gruel.

Ten, P.M. Leech-bites bleeding freely; pain little better; pulse 126, and softer. Enema has returned unaltered. Terebinthinal enema to be given immediately, and mechanical means employed for its retention.

Two, P.M. Symptoms much the same, but she now complains of great pain in all her joints, especially in the shoulders; slight subsultus tendinum.

Five, P.M. Matters were now much altered for the worse. The pain had diminished, except on pressure, when it was almost as acute as in the morning; tumidity much increased; distressing restlessness; great prostration of strength; thirst insatiable; pains in the joints increased; pulse 150, but extremely small. The enema had been returned with some very dark fæcal matter; about half a pint of highly coloured urine had been passed.

It is unnecessary to say anything more respecting the treatment as nothing appeared to have the slightest effect in allaying any of the more prominent symptoms; suffice it to mention, that the poor girl gradually sank, and at half-past nine, P.M., death terminated her sufferings. The intellect continued perfect until within five minutes of dissolution; and half an hour prior to this event she said that she felt better, the pain in the abdomen having ceased, and that of the limbs was much better.

Post-mortem Examination.

The extreme rapidity which characterised the accession of the fatal symptoms, made me exceedingly anxious for a post-mortem examination; to obtain which I was compelled to submit to the condition of opening the abdomen only. This was performed thirty-four hours after death. The features still retained the peculiar expression which they had assumed during the last two or three hours of existence. Ecchymoses appeared on different parts of the body, especially on those towards which the blood would gravitate.

The mammæ were but slightly developed; the abdomen was distended almost to bursting.

There was also a total absence of all the other appearances which ordinarily characterise puberty. The mother had previously informed me that her daughter had only once been unwell, which was about two years since; but on further inquiry I ascertained that the menstruation was very questionable, as the discharge had been but very

slightly coloured, and not attended with any of the other phenomena which usually indicate the accession of the catamenia. I mention this as it supplies another fact in support of the opinion which attributes the supervention of menstruation, and all its accompanying changes in the system, rather to the influence of the *ovaria* than to that of the *uterus*.

On making an incision through the peritoneum an immense quantity of intensely fœtid flatus escaped. About seven pints of opaque serous fluid (in which floated large quantities of flocculi of coagulable lymph) had collected; recent depositions of the same substance had glued the intestines together very extensively. Along the jejunum and ileum there were several small masses, presenting all the appearance of purulent deposits. On passing my hand behind the stomach, I found it had contracted extensive intimate adhesion to the pancreas; I therefore made an incision into the former viscus *in situ*; and after carefully collecting the contents, and sponging the internal surface, two perforations presented themselves, through the larger of which (about the size of a shilling) a portion of the *pancreas* protruded, and completely filled up the opening. Around the circumference of this the pancreas was finally united for 2 or 2½ inches; the coats of the stomach to the same extent were nearly twice their natural thickness, and much indurated. Every other portion of the viscus was perfectly healthy, with the exception of a small space, occupied by another diseased and indurated portion, immediately opposite to the former, in the centre of which was a second, though much smaller perforation. Here, unfortunately for the poor girl, Nature had been unable to employ so successful a scheme, as in the other case, for preserving the continuity of the part; the result, of course, was, that large portions of the ingestion, especially liquid, had escaped into the cavity of the peritoneum, and caused her death. With respect to the pancreas, it was nearly one half larger than natural, and contained many points of exceeding hardness, approaching almost to scirrhous induration; the portion which was seen through the perforation looked like a piece of half-digested meat; but probably this appearance was the result of a post-mortem action of the gastric juice.

Not being permitted to open the chest, I passed the scalpel through the diaphragm, as high as possible, into the thorax, and so obtained a considerable portion of the œsophagus, the structure of which was perfectly healthy. The intestines contained but little fæcal matter. In some parts, especially about the arch of the colon, the usual appearances of enteritis, so far as vascularity is concerned, presented themselves, while in others no deviation from the normal condition was perceptible. In no part whatever was there the slightest appearance of ulceration; Peyer's glands were, however, somewhat enlarged.

The spleen was healthy, as was also the liver. The peritoneum investing the duodenum was highly tinged with the contents of the gall-bladder; kidneys sound. The bladder contained about a quarter of a pint of viscid urine.

A remarkable circumstance in this case was the *non-existence of ovaria*; a small process of peritoneum was given off from each upper corner of an imperfectly developed uterus; there was not even a perceptible rudiment of the Fallopian tube. I very, very much regret being so much hurried in this part of the examination by the friends of the deceased, and still more, that circumstances did not enable me to become possessed of the highly interesting preparations which might have been collected from this extraordinary case.

EXTERNAL APPLICATION OF CALOMEL FOR CHANCRE.

By Edward J. Burton, *M.D., Assistant-Surgeon, Royal African Corps.*

The internal administration of mercurial preparations being at the present time considered by many not only useless but even injurious, it becomes a desideratum to discover some effectual and speedy method of curing primary syphilitic sores. Having seen many cases of chancre, some not characterised by any bad symptoms, others again in every feature resembling the Hunterian chancre, with excavated edges, indurated base, &c., cured by the simple treatment I mean to detail, I think it not inappropriate to lay it before the profession.

Case 1.—Several years ago a gentleman who had contracted a sore on the penis, having all the characteristics of chancre, consulted me. The bowels being opened by an aperient, I applied the nitrate of silver to the sore, covering it with lint; this I removed in 24 hours. I now covered the surface of the sore with calomel, applying a piece of lint, as before; this dressing I also removed in 24 hours. After the first application of the calomel I was struck with the evident improvement in the appearance of the ulcer; on the second application the sore was not only much improved in appearance, but nearly cicatrised; on the third application the sore was entirely healed. Being probably struck by the result of this case, I have ever since adopted this treatment, and invariably with success. More recently, at the Chatham Military Hospital, I had an opportunity of putting this treatment to the test in an exceedingly satisfactory manner.

Case 2.—M. T——, a young soldier, of full habit and good constitution, was admitted into hospital with a syphilitic ulcer of the penis, situated at the junction between the glans and prepuce; he was treated for eight or ten days before he came under my care, by the usual applications, such as solution of the sulphate of copper, black wash, &c., without any apparent benefit. The sore now presented a surface as large as a sixpence, and of unhealthy appearance; I immediately applied the nitrate of silver and calomel in the manner above described, and in three days the patient was dismissed to duty.

Having shortly after received two patients with chancres on the penis, in every way similar,—to one I applied the *nitrate of silver and calomel*, for the other I prescribed the compound mercurial pill and the black wash. The patient treated in the former way was cured by three or four applications; the latter improving, but slowly, after eight or ten days I stopped the mercury and black wash, and applied the calomel and nit. of silver with the usual success. My friend Dr. Burgess, of London, can testify to the efficacy of this method of treatment, having witnessed several of the cases.

Although the practice here recommended is entirely local, I do not wish it to be inferred that I confine myself altogether to local means for the cure of syphilis; indeed, if we keep in view the prevention of secondary symptoms (a thing never to be neglected) the records of the medical department of the Army are in favour of the internal administration of mercury for that purpose. But the speedy cure of the primary ulcer is, in all cases, a matter of great importance, as the more quickly the sore is healed the sooner the syphilitic virus ceases to be taken up by the absorbents.

Chatham, June, 1838.

CROWING INSPIRATION.

To the Editor of The Lancet.

Sir:—If you deem the following case worthy of a place in the pages of The Lancet, it is at your disposal. I am, Sir, your obedient servant,

George Lucas, L.R.C.S.E.

Ilkeston, Derbyshire,
June 8, 1838.

A. B., aged four months, was attacked with fits of crowing, which frequently recurred, and were sometimes so prolonged as to threaten dissolution. On making inquiry into the state of the child's health, previous to the attack, I was informed that, during the preceding day, he had been rather fretful; that his bowels were confined, and his breath disagreeable. After the appearance of the paroxysms, his parents administered some laxative medicine, which operated twice with some relief to the frequency and duration of the attacks. As the gums presented no appearance indicative that any of the teeth were about to cut, I immediately ordered a mild emetic, after the operation of which the child was to take small doses of calomel, to be followed by castor oil, until the bowels were freely acted upon. Immersion in warm water, at bed-time, was also ordered. At my next visit, I was glad to find the little sufferer free from complaint. The matter ejected from the stomach, was reported to have been of a green appearance; the bowels responded several times to the medicine, after which the crowing vanished.

This case appears interesting, as occurring in a child at the breast, so early in life, contrary, I believe, to the general experience of Dr. James Clarke, as being unconnected with the process of dentition, and as confirming the views of Dr. Marshall Hall, that the crowing disease may arise from gastro-intestinal irritation, propagated through the medium of the pneumogastric and the spinal nerves.

STONE IN THE BLADDER
AT THE
BLENHEIM-STREET DISPENSARY.

To the Editor of The Lancet.

Sir:—Thinking that the enclosed case is somewhat rare, and likely to furnish matter for consideration with regard to the treatment of stone in the bladder, by lithotrity, I have much pleasure in submitting it to the consideration of the profession, through the medium of your Journal. I am, Sir, your obedient servant,

John Crowch Christophers.
17, Portland-street, Soho-square,
June 14, 1838.

Ann H., residing in Ogle-street, aged 37, of bilious complexion, and highly nervous temperament, became a patient at the Blenheim-street Dispensary, on Thursday, April the 4th, 1838. She was first seen by the visiting officer of that charity, to whom she narrated her case as follows:—"I have now been ill about ten years; at the commencement of that period I was attacked by a fever and inflammation of the lungs; a blister was applied to the chest, and in a few hours I suffered from retention of urine; a catheter was introduced by a gentleman, the surgeon of some benevolent institution, and about a fortnight after this period his attention was called to the circumstance of the catheter becoming filled with a ropy mucus, and the urine throwing down pus. Three years after the above period, during which the catheter was frequently and re-

gularly introduced, the urine became tinged with blood, which the surgeon stated proceeded from an abscess. This state of things was followed by the passage of curious little opaque bodies, resembling the boiled lens of the eyes of fish; their passage was attended with violent pain, and with a constant desire to evacuate the bladder. At this period the surgeon ceased attending me, and was succeeded by another. The latter gentleman who, from time to time, was in the habit of passing the catheter, in June last told me he discovered I had a stone in my bladder, and in the November following sought the assistance of Mr. Costello, who sounded me most carefully, and stated there was no stone, but a tumour of the uterus. Mr. H. continued to attend me to within a few days of my applying to your Institution."

On the 4th of April, the day she became a patient at the dispensary, she was lying in her bed, totally unable (as she stated) to rise, and had been in that state during the month preceding; she complained of weight and pain in the hypogastric region, immediately above the pubes, with constant dribbling of urine, and a sensation as if some foreign substance existed in the bladder, which, whenever she attempted to urinate, appeared to fall down (as she expressed it), and to prevent the exit of the urine. She was ordered some small doses of alkali, and on the following morning thought herself better. Mr. King's attention having been called to the case, he passed a catheter into the bladder, but withdrew it almost immediately, partly because the instrument was not adapted to a minute exploration of that viscus, and partly on account of the state into which it threw the patient. Indeed, her demeanour was most extraordinary, her whole body being in a state of tremor, her countenance flushed, and her voice that of extreme emotion. Mr. King felt no stone, but gave it as his opinion that the woman was labouring under nymphomania. The treatment was continued on this and the following day.

On the 7th I was sent for by the patient, who, on my arrival, stated that she was in great pain, and could not pass "a drop of water." Not having my instruments, I was about to return to procure them, when the patient produced a catheter from under her pillow, which she stated she had been in the habit of trying to use herself, but could never succeed. The catheter was immediately passed without difficulty, the patient exhibiting the same phenomena as on the last occasion; but a small quantity of urine was drawn off, and the instrument was removed. In withdrawing it, I felt it most distinctly strike some hard substance at the neck of the bladder, which left no doubt in my mind of the existence of some foreign substance in that organ.

On the 9th I was again sent for, and went, accompanied by Mr. Andrews (Mr. King's house-pupil). She complained in the same way as on the 7th, and begged to have the catheter again introduced. On directing my finger to the upper part of the vagina, at the external orifice of the meatus urinarius, I detected a hard and rough body, which totally obstructed the passage of the catheter, completely filling, and very much distending the urethra; Mr. Andrews immediately made an examination, and experienced the same sensation. It was then decided to examine the patient, in order to ascertain the nature of the obstruction we had to combat. On accomplishing this, a small portion of a stone was distinctly seen at the external orifice of the meatus, and after considerable pain and difficulty, was withdrawn therefrom with a pair of common dressing forceps. The stone is evidently of a silicious character, presenting on its different surfaces urinery deposit, and has every appearance of having been in the bladder some time; its weight is 174 grains, it is of a somewhat square flattened form, three inches in circumference, from half to three-quarters of an inch in diameter, and its general aspect is that of a flint pebble. The spasm, before referred to, existed during the whole of the above described operation. After the removal of the stone, on examining the same, Mr. Andrews exclaimed, "This was never engendered in the bladder; it has every appearance of having been introduced there from without." At this remark the patient exhibited much annoyance and discomfiture, which required some little management to pacify. The following morning the stone was shown to Mr. King, who was not at all satisfied as to its having been extracted from the meatus urinarius. He thought it must have come from the vagina, went a few hours afterwards to the patient's residence, and by physical examination dissipated his misgivings, returning fully convinced of the veracity of the statement previously made to him: for he could, with the greatest facility, pass the forefinger down the meatus even into the bladder.

The urine was discharged, involuntarily, with blood till the 13th, when the patient left her bed, and walked across the room; she continued to improve till the beginning of May, when she complained of a swelling in her side, corresponding to the left ovary. She was able to go down stairs, and to walk in the street.

On or about the 6th of May, she sent to the dispensary to say she was much worse. Mr. King saw her, in company with Mr. Andrews; she had a number of phagedenic ulcers on the left breast; the hair had fallen from her head, and the scalp was covered with a scaly eruption, all of which effects seem to be attributable to the ex-

haustion consequent on nymphomania. The patient did not confess that she had passed the stone into her bladder; but the day after Mr. King had endeavoured to impress her with a sense of the danger to which her nervous excitement exposed her, and told her the stone must have been put into that organ, she wrote a letter, denying she had introduced it herself, but stating that she could only account for its presence, "inasmuch as she had been taken advantage of by a middle-aged gentleman now in France."

STATEMENTS RELATIVE TO THE UPAS TREE.

To the Editor of THE LANCET.

SIR:—On perusing Dr. Sigmond's lecture in reference to the above subject, reported in your valuable periodical, I felt astonished that a man of his acknowledged ability should recirculate the "extravaganzas" of Foersch and others. The lecture in question contains the following remark:—"Few of the wonderful phenomena which are exhibited in the vegetable kingdom have excited greater attention and curiosity than those which are ascribed to the poison-tree of Java, the Bohon Upas: certain it is that that there exists in the island of Java a valley into which every living being that enters immediately dies." Let us inquire how far this statement is correct, how supported, and by whom.

Various *hearsay* stories on the matter reached Europe, generally attributed to Dutch soldiers and seamen, but no printed account appeared until the year 1783, when a Dutch surgeon published one in Holland: in 1785 a translation of this was printed in the "London Magazine," which "more than confirmed the wonderful things that had been told of it." According to his account "the *dreadful* poison-tree was situate at the distance of 27 leagues from Batavia, and only 14 leagues from Soura Charta, the place of the Emperor's residence. It grew in a deep valley, entirely surrounded by barren mountains. Being determined to go so near the spot as safety permitted, and having obtained the Emperor's permission for so doing, he set off and travelled entirely around the mountains that surround the Upas valley, keeping always at the distance of eighteen miles (!) from its centre, &c." A reviewer of this surgeon's pamphlet quaintly asks, "how could he keep eighteen miles from the centre, not knowing where that centre was, unless we allow him to be endowed with *mathematical instinct*."

This preparatory flourish of Foersch is sufficient to condemn him as an authority in the estimation of sober thinking men. We also find his statement directly contradicted by one John Mathews, whose statement may be found in the 64th volume of the "Gentleman's Magazine," 1794. This man resided twenty-three years in the island of Java, and was there *at the time* that Foersch pretended to have made his wonderful discoveries, and he *indisputably* proves Foersch's story of the Upas tree to be a most barefaced fabrication. Again; some years after, a Swedish naturalist, who read an inaugural dissertation at the Upsal University, giving an account of the poison-tree, says,—"It grows in many parts of India, as Java, Sumatra, &c.; there are two species, male and female; its trunk is thick; branches spreading, dark brown, and wood solid, of a pale yellow, variegated with black spots, &c." He, however, makes no mention of Foersch. In the same lecture we have also an account of the expedition of Mr. Loudon and friends, the results of their experiments, &c. I trust I may be allowed to say that I believe these statements to be firmly contradicted by Dr. Horsfield, the celebrated botanist, who is strongly supported by no less a man than Sir Stamford Raffles (see his work on Java); one who was not likely to be led away by mere speculation, nor to support fiction against truth, to please any party. What does Dr. Horsfield, who has seen the tree and collected its poison, say? His statement is as follows:—"Although Foersch committed an extravagant forgery, yet the existence of a tree in Java from the sap of which a fatal poison is *prepared*, is a fact. This tree is called the *Anchar*, growing in great abundance, and in the eastern extremity of the island. It belongs to the twenty-first class of Linnæus, or the Monœcia; the male and female flowers are produced on the same branch at no great distance from each other, the female being in general above the males. The seed-vessel is an oblong drupe, covered with the calyx, the seed an ovate nut, with cell," &c. &c. "The juice or sap is yellowish, rather frothy, and when exposed to the air its surface becomes brown; in consistence it is much like milk, but thicker, and more viscid. The sap is contained in the inner bark of the tree, and the *only* difficulty I had in making my experiments on the tree was the fear the natives had of a cutaneous eruption, and nothing more. The Anchar is one of the largest trees of Java; it delights in a *fertile* soil, and is found only in the midst of large forests, and on all sides it is *surrounded* by shrubs, and in *no instance* by barren desert. The largest specimen I saw was so embosomed in common trees and shrubs that I could hardly approach it; wild vines and other climbing shoots in *complete health*, adhered to it, and ascended half the height of its stem. While *I was collecting the sap* I observed several young trees that had sprung up spontaneously from seed dropped by the parent plant."

Now, I think that any candid reader, after perusing the scientific and evidently *ocular* description of Dr. Horsfield, will agree with me that the Upas tree can have no connection with the Upas valley, *if* such a place *do* exist, for its sap may be extracted and handled without the least danger. As to the *preparation* of the poison, that still remains a secret. I am, Sir, your obedient servant,

CHARLES CROSS.

Honitons Clist, Devon,
June 7, 1838.

TREATMENT OF

RHEUMATIC GOUT

WITH

COLCHICUM ON A NEW PLAN.

To the Editor of THE LANCET.

SIR:—Your readiness at all times to serve the profession induces me to trouble you with the accompanying account of a valuable remedy for that most troublesome of all complaints "rheumatic gout." In addition to the testimony of my much respected friend, founded on very extensive and well digested experience, I beg to add my own, as I have tried the same means, though on a limited scale, with perfect success. I am, Sir, your obedient servant,

JOHN PROPERT.

New Cavendish-street,
June 20, 1838.

Communication from Mr. Wigan, of Brighton, to Mr. Propert.

My dear Sir,

In compliance with your wish for a fuller account of my mode of treating rheumatic gout, I proceed to give you all the details which are necessary to ensure success.

The only remedies which seemed, after various experiments, to have any decidedly beneficial effect on rheumatic gout were three:—

Vegetable alkali,
Camphor, and
Colchicum.

The *first* I adopted in consequence of observing the good effects of a popular cure for rheumatic gout used in the western and south western counties of England, viz., the ashes of the bean-stalk. Large doses of potassa certainly tended to shorten the duration of the malady, and materially to hinder the formation of earthy deposits in the joints; in fact, the first time the remedy was mentioned I was instantly reminded of a fact which I had often noticed, *the intense acidity of the perspiration* in this disease, and, indeed, of other secretions, as the urine and even the saliva. I had often observed that scissars and other articles of steel, and the fire-irons in the bed-room even were rusted in a short time, as if they had been subjected to the steam of vinegar. Bearing this in mind it seemed natural and reasonable to expect benefit from alkalies. I am not aware that any writer on this subject has made a similar observation.

I have forgotten from what strange analogy I was induced to try camphor, which, however, I gave largely and with great relief from the pain, but with no permanent benefit to the patient.

All the preparations of colchicum I used extensively, but their uncertainty, the impossibility of ascertaining beforehand the proper dose in each case, the formidable symptoms to which it occasionally gave rise, and the *real danger* to one person from a quantity which had no effect on another in a case strictly analogous, made me ultimately, but reluctantly, lose all confidence in this drug, and about ten years ago I had gone back in despair to my old plan of vegetable alkali and camphor.

When I soon afterwards fixed my residence at Brighton an opportunity was afforded me of putting my remedies to the test of a still more extended experience. Some of my trials were made with very complicated remedies, too tedious to enumerate, but of which colchicum in some form was often a part. From the multifarious compound which was ultimately found to be most effectual, I gradually discarded one ingredient after another until it was reduced to the simple and effectual remedy now offered. The quantity and the mode of administration have been varied in every way, and I rest satisfied that no further change is necessary or advantageous. On no one of the many occasions on which it has been used have I seen the slightest injurious consequence, and I do not now hesitate to pronounce it the *most easily managed, the most universally applicable, the safest*, and the most *certain specific*, in the whole compass of our opulent Pharmacopœia, the mode of exhibition being an effectual regulator of its influence, adapting it accurately to the varying temperaments of different patients. Administered in the way I prescribe, and with the limitations stated, I feel quite confident that no one will be disappointed in the results to be expected from it. No doubt there may be complications of this disease which may render other measures advisable; cases of plethora, or of inflammatory action, so decidedly marked as to leave no doubt of the propriety of taking away blood: it may be so; I have seen none such, at least none in which I have thought it necessary to use the lancet, though I see no disadvantage in erring on the safe side, and just relieving the tension of the blood-vessels by moderate depletion. *Large bleedings I believe to be always injurious;* they seem to me to aggravate the tendency to metastasis. The cases which re-

quire bleeding must be extremely rare, since not one has presented itself to me during the last six years. I am sorry to say that when this disorder has gone on for some time, when it has been allowed to spend its violence on the articulations and especially those of the vertebræ (the most frightful form of the disease) during a fortnight or three weeks, the remedy is by no means so effectual; still it has great influence in alleviating the pain, and in shortening the duration of the malady, although *the transition from intense suffering to perfect ease* is less sudden and decided. I have uniformly remarked that the more violent the attack the greater the number of articulations under its influence, the higher the fever and the more general the disturbance, the more speedy and the more perfect is the cure.

Treatment.—The powdered root of colchicum is, then, the specific on which I depend. It is an old remedy, but the mode of administration is new and entirely my own. If the bowels be loaded I begin by an enema of decoct. aloës, but this does not delay the use of the colchicum. The dose is eight grains every hour, taken in the medium most acceptable to the patient. The *point of saturation*, as I call it, is very uncertain, varying so much with different individuals that although the usual quantity is eight or ten doses, I have known some take fourteen, and others unable to bear more than five. In every case it is to be repeated till *active vomiting*, *profuse purging*, or *abundant perspiration* take place, or at least till the stomach can bear no more. If a slight nausea comes on after three or four doses (I have never seen it so soon as the fourth) a quarter of an hour's delay may be allowed. A lump of sugar dipped in brandy or eau de Cologne, a wineglass of soda water, or anything else the patient wishes for, *in small quantity*, may be given. Sometimes a small slice of lemon kept in the mouth will turn away the nausea, and enable him to bear a few more doses, the main object in all cases being to get into the stomach the largest quantity that it can be induced to receive; even two doses taken at once would be rejected by a patient who will thus gradually bear a dozen. The most usual course of things is this: at the end of the sixth or seventh dose a slight nausea comes on; by keeping quite still, turning away the thoughts by conversation, or listening to an amusing book, *coaxing* the palate with a slice of lemon, a clove, or some such thing, three or four more doses can be received, when the disgust becomes perhaps unconquerable. After this there is generally sound sleep, with occasional nausea on waking; the pain ceases, but the more active effects of the colchicum do not take place for some hours after the last dose. Distressing as is the state of the patient when under the full influence of the medicine, it still does not exceed an ordinary sea sickness, and when this has been endured for a few hours it is succeeded by the calm of Elysium. The inflammation of the joints subsides, and they resume their natural size with miraculous rapidity; the acidity of the perspiration ceases, as well as the peculiar odour which enables the experienced practitioner to recognise the disease on entering the room before he has asked a single question. As soon as a cup of Souchong tea can be retained a sound sleep comes on, from which the patient awakes perfectly well. When circumstances will admit of it I prefer to give a breakfast *of bread and butter and tea only*, very early in the morning, and two hours afterwards commence the colchicum. No more food will be required that day, but tea may be given abundantly with bread sopped in it if required. It will be well to indulge the returning appetite very sparingly on the day following, on which, however, we may allow a small snap of devilled meat, and rice boiled plain as for curry, which will generally be the things most acceptable to the stomach; a small quantity of good curry itself is not objectionable to those who have been accustomed to that luxury. In the subsequent treatment I have no reason to think that any precaution is necessary. The patient may resume his ordinary diet as soon as the appetite dictates. I have never seen a relapse.

The colchicum, it is obvious, should be preserved with care. The best mode, I believe, is to grind it at the proper season with twice or thrice its weight of fine sugar into an impalpable powder, when, should it accidentally become damp, it is safe from injury.

It is better, if possible, that the patient should not be aware of the direct effects expected until they take place, in order that the imagination may not anticipate and interfere with the process. I am, dear Sir, your's very truly,

A. L. WIGAN.

Brighton, June, 1838.

PETITION FROM READING.

To the Editor of THE LANCET.

SIR:—A petition against the flagrant abuses of empiricism has been forwarded to Mr. Sergeant Talfourd, by the members of the Reading Medical Society, praying for an early and efficient investigation of this important subject. I remain, Sir, yours respectfully,

CHARLES COWAN, M.D.

Reading, June 21, 1838.

MEDICO-BOTANICAL SOCIETY.

Wednesday, June 13, 1838

COMPOSITION OF THE NOTORIOUS QUACK LINIMENT OF ST. JOHN LONG.—THEORY OF ITS MODUS OPERANDI.—PROBABLE CAUSES OF ITS EXTENSIVE EMPLOYMENT—THE "RUBBING" SYSTEM.

DR. MACREIGHT called the attention of the Society to the composition of the lotion employed by the notorious St. John Long, which, at one time, excited no small controversy with respect to its imputed virtues. It was known to most of the members, that at the death of that person who, like Paracelsus of old, died with a bottle of his elixer-vitæ at his bed side, the secret of the composition was sold for £10,000. The present proprietors had now exposed it for sale, and it was in the power of any person to examine it. He (Dr. M.) assisted by his friend Mr. Fownes, had analysed it with some care, in Mr. Everitt's laboratory, and the result was, that it consisted of oil of turpentine, and acetic acid, held in suspension by yolk of egg. Having satisfied themselves that no other acid was present, they found, by saturating with carbonate of potass, that the quantity of pure acetic acid, was 5.3 per cent. They then distilled over the liquid portion, and found there floated on the surface, oil of turpentine to the amount of 25 per cent; the remainder of the liquid had the taste of vinegar, but was without any pungency or bitterness. The residual mass also, which was 7.5 per cent, when quite dry, was void of any stimulant or bitter taste; this on burning, gave out the odour of animal matter. He need not tell the gentlemen of that Society, how difficult was the analysis of most animal or vegetable matters, and how cautious one ought to be in speaking positively of the presence of any organic substance. The plan they adopted was to consider what bland substances were most likely to be employed for the suspension of the turpentine, and then, by testing, to find with which the matter had most analogy. In this manner, after examining gum and milk, yolk of egg was found to resemble the residuum of the lotion more than any other substance, and no difference was found in their behaviour to tests. Thus, the residuum was found insoluble in water; with alcohol, a portion was soluble, and this, by evaporation, was found to be an oil quite similar to that from yolk of egg. The portion not soluble in alcohol or water, had all the appearance of the albumen which remains when yolk of egg is treated in a similar manner; and on being subject to destructive distillation, gave out abundance of ammonia, emitting a peculiar odour, precisely similar to that from burning egg. The ash that remained, after incineration, weighed $\frac{1}{2}$ of a grain, and consisted of a trace of alkali with phosphate of lime. On such evidence, which he admitted, however, could not be considered as perfectly conclusive, he proceeded to test it synthetically, and having prepared some according to the following prescription, he found it to resemble the quack lotion most perfectly in appearance, taste, and smell.

Take—*The yolk of one egg;*
Pure oil of turpentine, one ounce and a half;
Strong acetic acid, one ounce;
Pure water, three ounces. First rub the yolk of egg, the water, and the acetic acid together, then add the oil of turpentine, and agitate the whole till they be well mixed.

He had employed the liniment pretty extensively during the last month, and found the results consequent on its application, perfectly the same as from Long's. The phenomena which followed the use of either one or the other, which were deemed miraculous by the votaries of quackery, and paradoxical by many of the medical profession, were, in his opinion, easily explicable on pathological principles. They were.

First. The excitement of a greater degree of redness on one part of the surface than another when uniformly rubbed, this spot generally being in the neighbourhood of the part where pain was felt.

Secondly. On the continuation of the rubbing for some time, the oozing of a fluid from the surface, varying in colour, the cuticle still remaining unbroken.

Thirdly. The healing of the part under the continued action of the lotion.

These effects, he contended, were what one ought naturally to expect from any moderate stimulus when applied to the skin with dexterous manipulations. With respect to the first, it was admitted by all pathologists, that when inflammation terminated in abscess, or when a foreign substance was lodged in the body, the tendency of the pus, or the extraneous body, was to the surface. Of this there were constant instances, in warm climates, occurring in the liver. Now, long prior to any visible change in the surface, the skin over the diseased part, or in that point where the abscess is likely to show itself, is found to be more tender than the rest of the surface, as pressing the palm of the hand over it will show. It stands to reason, therefore, that this point will, when stimulated, be more easily affected, and hence a greater degree of redness will develope itself in that position. He did not see why we should restrict this tendency to the surface to cases of inflammation terminating in suppuration. A sympathy of the skin with all internal inflammation, as is seen in gout and rheumatism, might be assumed as a general

principle, and of course the part sympathising the most will be the most easily affected by stimuli. As to the second phenomenon, the oozing out of a fluid from the surface, this was the necessary consequence of a stimulus not sufficiently powerful to cause vesication. When a very strong stimulus was applied to the skin, the cuticle appeared to lose its vitality; the mouths of the exhalants would not permit any fluid to pass through them, and hence the increased quantity flowing to the excited part became effused under the cuticle. Where, however, a gentle stimulus was for a length of time applied to the surface, the mouths of the exhalants became stimulated without the cuticle losing its vitality, or being abraded; the consequence was, there was a greater flow of fluid through the mouths of the exhalants. This, at first, would be little more than water containing some salts, but as the excitement was continued the vessels allowed a denser fluid to pass through them, consisting of the serum and crassamentum, without the red globules; but, should the excitement be very great and the part itself very much affected by the disease, the vessels often allow the red globules also to pass. That all these different fluids do exude, a few applications of any mild stimulus for half an hour over an irritable surface, will be sufficient to convince the most sceptical. Touching the last effect, the curing of the part under the continuance of the rubbing, this, in St. John Long's practice, was dependant partly on legedermain, and partly on the principle that when a substance does not act as a corrodant, the surface will ultimately become accustomed to it; but the act of manipulating was the principle one. It has been seen that it is the continued rubbing, more than the lotion, which causes the flow of fluid from the surface; it is, therefore, quite natural, that if the rubbing be deminished in intensity, the stimulus becomes much less, and thus the part heals under the application of the same lotion, but differently applied. Such, therefore, is the celebrated liniment of St. John Long, which, in itself, is harmless, the acetic acid being to the whole in nearly the same proportion as in common vinegar, and which could only be dangerous in the hand of an ignorant and reckless quack.

He would take leave of the subject by mentioning, that when a discharge had been established a cabbage leaf was applied over the surface, and this, in many respects, is superior to a common cataplasm, which is clumsy and dries up rapidly; but of course no regular practitioner would employ cabbage leaves while the simple and elegant contrivance, lint covered with oiled silk, was within his reach.

THE LANCET.

London, Saturday, June 30, 1838.

It has often been our painful duty to direct public attention to the mismanagement of the London Hospitals. So much prejudice and ignorance prevailed, at one time, on the subject, that many right-minded persons regarded these institutions with admiration, and looked with suspicion, on any attempt to rescue them from the innumerable abuses which nullify their advantages, and pervert them from the purposes at which their charitable Founders aimed, in their establishment. When corruption has attained a certain head, it grows honourable, respectable, aristocratic; and well-bred people never look at the cleft foot, when the face is fair, the equipage splendid, the manners plausible, the officers of the household imposing. But a change is taking place in the public mind; and the Treasurers, and Secretaries, and Stewards, and cliques of Governors in the London Hospitals will, if we are not mistaken, be called upon, ere long, to give an account of their stewardships. They will then see whether the partisans on whom they count can defend them from public indignation; and whether the Sick Poor can be defrauded with impunity, the funds of the charitable donors be jobbed away, the Institutions which in England, as in other countries, should be devoted to the cultivation of medical science, be made the stages of strutting mediocrity.

Although it would be difficult to discover any direct proof of talent in the Managers of the London Hospitals, no one can deny that they have exhibited considerable discretion in either withholding their accounts altogether from the public, or printing them in such a manner as defies a comparison with the accounts of other Institutions. No Report is published by the Treasurer of Guy's Hospital: the Report of St. Thomas's and St. Bartholomew's merely

states the number of patients discharged, dead, and remaining, substituting for a dry detail of the revenue and expenditure, "a Hymn of Thanksgiving," to be chaunted by the children of Christ's Hospital, in praise of the pious Governors. Middlesex Hospital is partially supported by subscription, and an Annual Report is submitted to the Governors. The Report neither states the average number of patients in the Hospital, the number of Nurses, Servants, and Officers, nor the quantities of the several articles stated to have been purchased, so that no individual Governor can say whether the expenditure has been extravagant or economical, whether the funds have been embezzled, or fairly devoted to the relief of the Sick. And after the charges that have been made against parties connected with this institution some criterion of the kind seems loudly called for. Far be from us any desire to prejudge the case, or to come to a decision on an *ex parte* statement, but it does appear that without entering into the points in litigation between the officer denominated "Man-midwife," at the Middlesex Hospital, and the Apothecary, a case for inquiry has been fully made out. The conduct of the Officers requires investigation, and the demand, on the part of the Apothecary, of "the fullest and most minute investigation into his conduct" should not have been met after the stigma cast on his character by "suspension:" to deal equitably with all, the inquiry should be extended, as suggested, to the Secretary, who holds the office of House-Steward, and deals with the funds of the Hospital.

If, in the course of the inquiry any mismanagement be detected, this should excite no surprise. There is absolutely no check on the conduct of the officers; the accounts cannot be audited; the greatest temptations are held out to profusion and jobbing by the very constitution of Middlesex Hospital. The officers are placed precisely in the situation that Clerks of Banking Houses would be in, if their books could not be checked; and what, under such a system, can the Governors of the Middlesex Hospital anticipate?

The Managers of Hospitals are too often actuated by indifference or a morbid ostentation; they rest satisfied with putting their hands in their pockets, contributing their guineas, and seeing their names on the lists of subscribers, without taking the trouble to inquire, whether the money really ever reaches the sick poor, or is intercepted by some scrupulous officer. A few of the Governors are usually implicated in the jobbing of irresponsible Hospitals, a few are blinded by friendship; but among the 1200 Governors of the Middlesex Hospital majority must be found desirous of giving the funds a legitimate direction, and no hope of such a consummation can be entertained till a full, searching inquiry has been instituted into every department of the management, with a view to the adoption of a sounder system, surrounded by all the safeguards which experience has proved are indispensably necessary in the distribution of the public money.

The first step in the inquiry will be the determination of the average number of In-patients on the Dietary of the Hospital during the last 5 years; and the total number of In-patients and Out-patients treated. The second step will be the determination of the weight and cost of each article purchased during the same period. The third step in the inquiry will be the comparison of the results with the experience of other well-managed Hospitals; such as the Canterbury, the Chester, the Lincoln, and 8 or 10 more well-regulated Provincial Infirmaries. And the final step will be the publication of an accurate analysis of all the facts for the information of the Governors.

In 1814, the Income of the *Middlesex Hospital* was principally derived from the following sources:—Annual Subscriptions, £2278; Dividends, £2874; Cancer funds, £503; Donations, £580; Legacies, £1352 The Total Income was £7792; the ordinary expenditure was £5860; and 1871 In-pa-

tients, 4909 Out-patients are said, in the Report, to have been treated. But our correspondent of last week states that while "the hospital bills are high, the returns of "lawful, recognised patients are disproportionately low." The stock of the hospital has, we presume, been reduced considerably by the erection of new wings; and unless the management be placed on a different footing, the subscriptions and donations are likely to decrease in a much more rapid proportion.

An Inquiry into the Nature and Treatment of Cholera, being Part I., Vol. II., of an Inquiry into the Principles and Practice of Medicine. By G. CALVERT HOLLAND, M.D. London, 1838. Longman and Co.

WHEN the Asiatic cholera first appeared in this country we were inclined to regard it as one of those mysterious visitations which are occasionally sent to desolate and depopulate the earth; and we had hoped that like its predecessors the "sweating sickness," the "great plague," &c., having swept over the country, and passed on to the New World, it would never again make its appearance amongst us. In this unfortunately, our previsions have been completely disappointed; even at the moment we write the Asiatic cholera prevails with its original intensity (though happily not extensively) in one portion of the United Kingdom, and there seems to be much reason for apprehending that the disease may recur again and again, before the period of its final departure. We are, therefore, pleased to find that some of the most enlightened members of the profession continue to occupy themselves with the study of a malady, the nature, treatment, and mode of propagation of which, notwithstanding the labour bestowed on them, are still involved in obscurity.

The author of the volume now before us is already favourably known to the medical public through his physiological writings; his "Inquiry into the Nature, &c., of Cholera," will not detract from the reputation which he has obtained.

Dr. Holland's work is divided into eight chapters, in which are successively treated, the symptoms and pathology of cholera; its exciting causes; mode of propagation; contagious nature; means of preventing contagion, and treatment; the last two chapters being devoted to "a brief summary of the circumstances which have led to such different opinions concerning the nature and treatment of cholera, and an enumeration of a few remedies which have been employed as specifics against the disease." There is nothing in the chapter on "symptoms" which need detain us; they are faithfully and graphically detailed; but we cannot agree with the author in an opinion which he has here expressed that cholera is almost exclusively confined to the poor, and the dissipated, or to persons of bad constitutions in the middle and upper ranks of life;—applied to this country the proposition is, to a certain extent, true; but a glance at the general history of cholera is enough to convince us that the most healthy constitutions are not exempt; for, in some places the disease has commenced amongst the easy classes of society, which suffered as severely from it as those in a more humble walk.

In discussing the pathology of cholera, Dr. Holland remarks that,

"An inquiry into the nature and action of some of the exciting causes of this disease would prove that the nervous system, and the whole animal economy are generally and necessarily disordered by the vitiated properties and irregular circulation of the blood; and it must be allowed, that every part of this system, so disturbed, will become a cause of additional derangement, proportionate to the degree of its depression, and the importance of its function."

We have searched in vain, however, for an explanation of what these "vitiated properties and irregular circulation of the blood" may be, or for an account of the experiments on the nature of choleric blood made by Drs. O'Shaughnessy, Rose, Rayer, and other chemists.

The mode of propagation of cholera, and its contagious or non-contagious qualities, are points of the very highest importance to be determined. Dr. Holland is a contagionist, though in a limited sense of the term. He conceives "that the foul air immediately surrounding the patient, and chiefly produced by respiration, and the morbid secretions of the body, may be capable of generating the disease." This does not seem to have occurred frequently in his practice, for only two examples of contagion presented themselves at the Cholera Hospital of Sheffield, whence the author concludes

that the influence of contagion has been greatly magnified by most writers.

Having traced the origin and progress of cholera, Dr. Holland endeavours to arrive at some fixed method of treatment amidst the variety of measures proposed by different practitioners, but particularly to establish the pathological principles which have suggested these remedies, and the manner in which they operate.

Cholera, however it may vary in the violence of its symptoms, or the causes of its production, may be considered, according to Dr. Holland, a *congestive* disease; the evident indication, therefore, is to re-establish the balance of the circulation. The most important remedy for this purpose, is, of course, venesection, upon which the author remarks, that

"Bleeding has been occasionally found highly serviceable in the treatment of cholera, but the success which has attended its application does not authorise its general or unqualified adoption. Its utility has appeared most decided in the spasmodic forms of the disease. When the vital powers are suddenly and inordinately enfeebled by the internal accumulation of blood, unaccompanied by muscular contractions, it can scarcely be used with safety, unless conjoined with other means calculated to rouse the system. It is not an easy matter completely to re-establish the functions of the circulatory apparatus, since, long after the pulse has regained its usual strength, and the generation of animal heat is regularly performed, the minute capillaries throughout the body, but particularly those which have been deeply implicated in the disorder, remain for a considerable time in a debilitated condition, destitute of sufficient energy to enable them to recover their natural powers. This fact is important, as it suggests the propriety of watching the progress of improvement through the whole stage of convalescence."

Next to bloodletting Dr. Holland ranks the employment of emetics which "has been attended on numerous occasions with great success. Mustard is unquestionably the best that can be selected, as it will occasionally excite vomiting, when the others would only nauseate, and it has, moreover, a natural tendency to give new tone and vigour to the capillaries of the stomach and bowels." The effects of venesection and emetics are to be seconded by a judicious use of internal stimulants, in the selection of which it is well to be regulated by the habits of the patient, and as the latter have generally been persons of the lower classes, addicted to the drinking of spirits or malt liquor, stimulants of this kind may be employed with advantage. Dr. Holland seems to have much faith in the efficacy of galvanism, as a means of rousing the system from the urgent state of collapse into which it is too often thrown by the disease.

"Galvanism (he remarks) should be employed in the earlier stages of the disease, before the animal system is too much reduced by its copious excretions to allow the successful operation of this or any other remedy. Its application should also be continued much longer than has usually been deemed necessary from the improvement almost immediately effected by it in the circulation. It is acknowledged by those who have employed galvanism in this disease, that those occasions on which it has failed to be useful, have been when it was applied to old or emaciated constitutions, or when its application has been made in the too advanced stage of collapse—facts strongly corroborative of the explanation given of its action."

The muriate of soda, in the doses recommended by Dr. Stevens, was tried by the author, but not successfully in any single instance in the stage of collapse, characterised by great depression of the vital powers. The same remark applies to saline injections, which act on the larger vessels without diminishing the congestion of the important organs of life.

From the foregoing very brief analysis it appears that the investigations of Dr. Holland have been guided by a tendency to his favourite subject of physiology. This leaning has, at least, the merit of giving to his work a degree of novelty and interest of which most of the so-called practical treatises on Asiatic cholera are entirely destitute.

TREATMENT OF FRACTURE.

Cheselden in his "Anatomy" relates that a London quack communicated to him a method of treating fractures, which he found to be a very efficacious one. His words are,—

"After this, having another case of this kind under my care, I thought of a much better bandage, which I had learnt from Mr. Cowper, a bone-setter at Leicester, who set and cured a fracture of my own cubit, when I was a boy at school. His way was, after putting the limb in a proper posture, to wrap it up in rags dipped in the whites of eggs, and a little wheat flour mixed; this

drying, grew stiff, and kept the limb in a good posture. And I think there is no way better than this in fractures, for it preserves the position of the limb without strict bandage, which is the common cause of mischief in fractures. When I used this method to the crooked foot, I wrapt up the limb almost from the knee to the toes, and caused the limb to be held in the best posture till the bandage grew stiff, and repeated the bandage once a fortnight."

Our continental brethren were, we take it for granted, completely ignorant of this passage, for latterly a very animated warfare has been carried on between some of the Parisian and Belgian surgeons, touching the discovery of this mode of treatment, which each claims in part, or in whole, for himself, and which M. Velpeau (if we recollect right) has called "the fixed apparatus" (*appareil immobile*). Leaving, however, the question of priority for the practical, we find that it has been recently employed at the Hamburg Hospital, by M. Fricke, in five cases of fracture of the humerus, three of the thigh, and eight of the leg. We do not think it necessary to reproduce the cases detailed by M. Fricke, his conclusions contain every point worthy of notice. They are as follows:—

The fixed apparatus discovered by Seutin is an essential improvement in the mode of treating fractures, and presents several advantages over all other methods.

1. The materials are very easily obtained; if starch cannot be procured, any other glutinous substance will answer.

2. It can be applied with the utmost accuracy of fitting.

3. It can be removed in whole or in part with great ease to both patient and surgeon.

One of the great advantages attendant on it is, that when the apparatus has been well applied and become solid, the patient may leave his bed in a day or two, and take exercise in his chamber. It is not, however, to be imagined that the apparatus of Seutin is suited for all fractures, and for every period of the accident; all signs of inflammation must have subsided before it is applied. —*Zeits. für die Ges. Med.*, April, 1838.

On Monday morning, June 11th, the members of the Belfast Medical Society invited Dr. Stephenson to breakfast at the Temperance Hotel, on occasion of the Doctor's ceasing to be Secretary to the Medical Society, an office he had held for sixteen years. Immediately after breakfast a presentation of books to Dr. S. took place, consisting of the Bridgewater Treatises, with a suitable inscription in each, accompanied by an address,

CASE OF

HYPERTROPHY OF THE BRAIN IN A CHILD.

By Dr. A. Schupman.

The child, about twelve months old, was born in the year 1831, of healthy parents. The labour was difficult and lasted four days. When three months of age the child was given to be nursed from home, and remained well for five or six weeks, but was at the expiration of that time suddenly seized with convulsions, which recurred frequently and assumed an epileptic appearance. It was at this period that the author was called in, who found the infant labouring under the following symptoms.

The head was remarkably large in proportion to the rest of the body, its temperature did not seem higher than that of any other part. The fontanelles were still widely apart, even more so than in a new-born child, and most of the sutures were separated by an interval of two lines from each other. The other parts of the body were well formed; the appetite good; excretions normally performed; the child slept well and quietly.

From the above symptoms the author concluded that the little patient was affected with chronic hydrocephalus, and on this supposition gave calomel in combination with the flowers of zinc (*oxide*). The use of those remedies was not attended with any benefit; the size of the head continued to increase; the face became of a sickly pale colour; the child lost flesh, but in other respects appeared well. A scrofulous swelling now appeared in the region of the neck, and soon terminated in an abscess which discharged a quantity of thin pus, mixed with blood. This healed under the ordinary applications, but shortly afterwards the child died in a fit of convulsions.

Necropsy 36 hours after death.

The points occupied by the fontanelles appeared much fallen in, although up to the moment of the child's death they were on a level with the rest of the cranium. The bones of the skull were thin, soft, and much injected. The dura mater appeared to be somewhat harder, thicker, and redder than in the normal state; the other membranes were healthy; there was no extravasation of blood on the membranes or surface of the brain.

On dividing the nervous substance, the medullary portion appeared considerably injected, and somewhat softened; the septum lucidum was excessively soft, as was also the corpus callosum. The lateral ventricles contained a very insignificant quantity of fluid; the plexus choroides normal; the pons varolii extremely hard. The state

of the cerebellum was exactly similar to that of the cerebrum; its medullary substance being somewhat softened. But the most striking circumstance was the size of the brain, which became apparent the moment the cranium was opened; the convolutions on the upper surface of the brain were remarkably enlarged and developed, and the weight of the brain was above two pounds and a half. The quantity of water in the ventricles was in this case so excessively small that I am forced to regard it as an example of hypertrophy, combined with softening of the central parts.—*Siebold's Journal*, Vol. 17, Part 2, 1838.

UNIVERSITY COLLEGE HOSPITAL.

INTRACTABLE TUMOUR OF THE HAND.—REMOVAL OF TWO OF THE METACARPAL BONES.

T. B., aged 22, a footman, was admitted June 3, under the care of Mr. Liston.

History.—About ten months since he observed the commencement of a soft and compressible tumour on the back of his hand; the skin covering it was not discoloured. The tumour was very painful for three days, at the end of which the swelling and pain almost entirely subsided. He cannot account for the origin of the tumour in any way, unless it was produced by the pressure which his hand was continually subjected to, from the leg of a chair, in carrying an invalid up and down stairs for several months. For the two months following the tumour increased a little in size, and became hard, but was not painful. The following particulars of the after progress of the disease we gather from a letter of a gentleman under whose care the patient placed himself:—"I first saw the case on the second of last November, and it then presented the appearance of a common ganglion in the back of the hand; the only peculiarity belonging to it was its not being quite so regular as these tumours generally are. However, this was then my diagnosis, and upon this I founded the treatment, commencing with pressure, and subsequently piercing the tumours, of which there were apparently three, with an acupuncture needle. This operation I repeated at intervals, but my faith in the correctness of the real nature of the disease was shaken, because there was not, on any one occasion, the escape of a single particle of serous fluid, the tumours remaining undiminished in size, and in all respects unaffected by the puncturing. On the 9th of January, a hospital surgeon being accidentally in our town, I requested him to give me his opinion; he at once pronounced it a thickened bursa, and recommended me to pass half a dozen threads of silk through it to excite adhesive inflammation. I was still doubtful of the nature of the case, and dwelt particularly on the fact of the *serous exudation being absent*. He, however, said it could be *nothing* else, and under his authority I followed his direction and made the seton; considerable excitement followed, and in forty-eight hours suppuration had set in, so as to set the silk completely at liberty; I therefore removed it. On the 17th, the upper opening made by the silk enlarged to the extent of a split bean, and a bloody-looking fungus was visible; this rapidly increased, raising up and causing ulceration the integuments in the back of the hand. I had then recourse to various remedies, and succeeded in keeping the fungus at bay till the 27th of February, when I felt satisfied that something more must be done, and I sent the patient to the surgeon who recommended the use of the seton. The fungus was then divided into three irregular portions; the largest about the size of a pigeon's egg, and the other two somewhat smaller; and the advice given was, that the radial and ulnar arteries should be successively tied, and the parts kept constantly cold with a solution of alum. This advice I acted on, and tied the radial on the 1st of March and the ulnar on the 14th. The effect on the fungus was most gratifying, and I began to think the disease would be unable to perpetuate itself, having lost so much of its support. In order to get rid of the fungus, however, I was obliged to have recourse to the potassa fusa, anything short of this seemed comparatively ineffectual; by the aid of this powerful caustic I succeeded in bringing the fungus down to a level with the integuments, which was about six weeks ago. Since then, finding a small muscular branch in the back of the wrist, carrying on a considerable circulation, I divided it, and, to my great annoyance, I now find a branch parallel to, and in continuation of, the radial artery, again becoming evident, although it was as perfectly quieted by the ligature, and as securely tied, as any investiture that can take place. I have now brought up the case till within a short period of the present day, and I am now applying the chloride of zinc with carbonate of lime, which I find a good escharotic, but still the germs of the disease remain."

The sore is now below the level of the surrounding skin, extending over the whole of the back of the hand, and covering almost entirely the four metacarpal bones of the fingers; in the centre the surface of the ulcer is irregular, and covered with a thick, dirty, discharge; the skin at the edges is red, thickened, and elevated.

June. Water-dressing; the general health to be attended to.

4. To-day Mr. Liston operated for the removal of the tumour. He carefully dissected it from the extensor tendons; but finding, during this process, that the meta-

carpal bones of the second and third fingers were soft and pulpy, involved in, and firmly attached to, the diseased growths, he determined to remove these two bones, with the fingers, at the carpal articulation. This was speedily effected; the whole mass was removed, and the palm was left entire. There was a good deal of hæmorrhage; several vessels were tied.

6. The wound is granulating kindly.

18. Has been going on well since the last report, and he will have a comparatively useful hand.

Mr. Liston said, that the above case was a very puzzling one. He had been, by the previous history, led to suppose that the disease was confined to the soft parts. The students, however, had seen what took place in the operation, and that the disease was not only seated in the soft parts, but had extended also to the bones, which were quite soft, and had thrown up spicula into the tumour. It was not improbable that the mischief had originally sprung from the medullary canal of the middle metacarpal bone. He thought at first, on discovering this, that nothing but the removing the hand would avail; but he was enabled, by acting on the spur of the moment, and performing a difficult operation, to save the best part of the hand. He had, as they saw, removed the metacarpal bones of the middle and ring finger, which was certainly much better for the patient than losing his entire hand. Operations of this description were generally required after gun-shot wounds, or injuries from machinery. The hand was not to be removed, though much of it might be involved in disease or perfectly smashed; it was the duty of the surgeon to save as much of it as possible, if it were only the first, or little finger, it should be saved; but where the thumb with a finger to meet it could be preserved, the patient had, to a certain extent, a very useful member, better than could be supplied by any kind of machinery. Surgeons were not warranted in removing the hand in such a case as that (showing a drawing), in which there was a gun-shot wound involving only the first finger; nor were they to operate for removal of the hand even though shot had passed through the middle of it. It was only when mortification had set in that amputation in such cases was a justifiable proceeding. The same rule was also to be observed in injuries of the foot, and an instructive case of this kind had been brought into the hospital, just as the operation in the present case was concluded.

THE proportion of still-born children, is about 1 to 22. The proportion is much larger in towns than in rural districts, which M. Quetelet is much inclined to *attribute to tight lacing*. Still-born births occur more frequently in winter than summer.

THE TEETH A TEST OF AGE.

To the Editor of THE LANCET.

SIR:—I have to request the favour of the insertion in THE LANCET of the following practical observations on the manner in which the examination of the teeth is to be conducted, with a view to determine the age of children, more particularly with reference to their qualification for factory labour. They have been drawn up at the suggestion of Messrs. Horner and Saunders, two of the inspectors of factories, who have, to a considerable extent, adopted in their districts the test, into the value of which I instituted an inquiry in the early part of the last year,* and have assured me that it has been attended with the most satisfactory results. I have the honour to be, Sir, your obedient servant,

EDWIN SAUNDERS.

16, Argyll-street,
June 16, 1838.

The following observations, which are intended as

Brief Hints to the Certifying Surgeons,

are founded upon the results of the careful examination of upwards of 2000 cases, and may, therefore, be relied on with some degree of confidence.

Age having been pronounced by the Crown lawyers, whose opinion has been sought upon the subject, to be the primary object of inquiry, in granting a certificate of qualification for factory labour, and the development of the teeth having been shown to be the best criterion of age, to be obtained from the physical characters, the question presents itself, what are the appearances of the mouth at the particular ages contemplated in the Factories Regulation Act?

The Act has provided that no child shall be employed in cotton, woollen, and flax mills under nine years of age, and that no child under thirteen years of age shall work in those mills more than nine hours in any one day, or more than 48 hours in any one week. These, then, are the ages to which the attention of the certifying surgeon is to be directed, and the following would appear to be the developments proper to those periods:—

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* See "The Teeth a Test of Age, considered, with reference to the Factory Children," by Edwin Saunders, Lecturer on the Anatomy and Diseases of the Teeth, &c. &c. Renshaw, 356, Strand.

Developments of Nine Years of Age.	Incisor.		Cuspid.	Bicuspid.		Molar.	
	Central.	Lateral.		Anterior.	Posterior.	Anterior.	Posterior.
Normal.....	4	4	....	....	....	4	—
Deviations....	4	3	....	....	....	4	—
	4	2	....	....	....	4	—
Minimum	4	....	....	....	....	4	—
	3	2	....	....	....	4	—

It need scarcely be observed, that in the foregoing table the second or permanent teeth only are regarded. It may frequently happen that these present themselves in an unusual position, the corresponding teeth of the first set being still retained. This, however, will not affect the examination, since it is not the absolute number of teeth contained in the mouth, but only the number of the second set, which may be in a more or less advanced stage of development, on which reliance is to be placed. In the first line of the table the full developments of the ninth year are recorded. In this case the four incisor teeth of the permanent set in each row have succeeded to the places of those of the first, and from the consentaneous growth and expansion of the maxillary bones, no retardation or mal-position will be observed. From this, however, although observation has shown it to be of more frequent occurrence than any other, there are many deviations. The first of these is where the lateral incisor, from deficient development of the maxillary bone, is crowded and pressed upon, so as to prevent its eruption from the gum. This may occur in either the upper or under row, or both; in either case it should be reckoned as present, and its absence attributed to some mechanical obstruction retarding its progress, provided its fellow be freely developed. Occasionally, but rarely, the lateral incisors are altogether wanting, and still more seldom one of the central incisors (in the upper row) is absent. In the latter case, provided the lateral incisors should have made their appearance, the absent tooth should be reckoned as present. These cases, however, which should be regarded as the minimum developments of this age, occur but rarely (in about the proportion of 7 per cent.), so that unless a child exhibit unequivocally the general aspect and strength it cannot be considered as being of nine years of age. Thus, then, the examination of the teeth at the age of nine years is exceedingly simple, virtually resolving itself, indeed, into the observation of the eight teeth situated in the anterior part of the mouth; the incisors,—for the molar teeth, although they are recorded in the table, need scarcely be regarded,—being the earliest of the permanent teeth which are developed, and generally making their appearance between the sixth and seventh year.

The developments at thirteen years of age appear somewhat more complex; the examination at this age, however, will be found to be equally simple, for it fortunately happens that the ages contemplated in the Factories Regulation Act, are those which of all others are best characterised by the developments of the teeth, and are best adapted for examination. Both epochs are well marked by the appearance of important teeth; the first by the development of the incisor and first molar teeth, the second by that of the cuspid and second molar; the intervening period being occupied in the development of the bicuspid teeth, which are subject to much greater irregularity in the time and order of their eruption, the age is of consequence much less distinctly indicated. At thirteen years of age the following teeth will have made their appearance:—

Developments of Thirteen Years of Age.	Incisor.		Cuspid.	Bicuspid.		Molar.	
	Central.	Lateral.		Anterior.	Posterior.	Anterior.	Posterior.
Normal.....	4	4	4	4	4	4	4
Deviations....	4	4	....	4	2	4	3
	4	4	1	4	1	4	2
Minimum.....	4	4	4	4	3	4	—

The most important teeth to be observed at this period are the cuspid, or canine, and the second molar, the seventh tooth from the centre of the mouth. The intermediate class, the bicuspid, when the process of dentition proceeds normally, will have made their appearance, but they are subject to much variation, and need not be particularly regarded. The more frequent deviations will be found to occur in the second molar teeth, one or more, and in some instances the whole of which will not have made their appearance.

In these cases, if the cuspid teeth be freely developed, and the child present the ordinary physical appearances belonging to the age, it may be considered as having attained its thirteenth year, because occasionally, though rarely (such cases bearing a proportion of scarcely more than 2 per cent.), this deviation is encountered. More frequently one or more of the second molar teeth may be observed just emerging from the gums, but in comparatively few cases will the whole be found fully developed, an appearance which belongs to the fourteenth year. More rarely still the cuspid teeth will be deficient; in these cases which are, however, seldom encountered, the decision must depend upon the degree of development of the second molar teeth, if these are present, as the period of their eruption is subsequent to that of the cuspid teeth, and provided the physical appearances coincide, the child may be presumed to have attained its thirteenth year. The minimum developments of this age are where one of the cuspid only, and two of the second molar teeth, are present, and *vice versa*, or where the whole of the second molar teeth are absent.

Thus, then, the examination at this period is sufficiently simple, the observation being confined to the cuspid and second molar teeth. The former being large prominent teeth, and situated at the angle of the lips, are easily recognised, and the latter may be distinguished with the utmost facility from the circumstance of their being the seventh teeth from the centre of the mouth.

The question, however, is often asked what are the characteristic differences between the teeth of the first and those of the second set? It cannot be denied that this is a subject of the first importance, since the most serious and irreparable mischief may arise from malpractice resulting from the want of a distinct and definite diagnosis.

The characteristic differences between the first and second set of teeth are of three kinds,—

First. Difference of size.

Second. Difference of form and configuration.

Third. The degree of abrasion which they have suffered.

The first and most obvious distinction between the temporary and permanent teeth is the difference of size, the former being little more than half that of the latter. This may be well observed in cases where little expansion of the maxillary bones has taken place at the time of shedding. Normally, or where consentaneous growth has proceeded in the containing and contained parts, where the jaw has become developed in due proportion, a considerable interval may be observed between the temporary teeth at this period; the teeth will no longer be in apposition, but separated more or less from each other, so that when their successors make their appearance only the corresponding teeth of the temporary set are displaced, the greater width of the new teeth being compensated by the intervening space; where, however, the growth of the jaw and the development of the teeth have not been consentaneous, the new tooth being impeded in its progress, will make its appearance in an unusual position, requiring the additional removal of neighbouring teeth. Thus, to afford sufficient space for the central incisor of the permanent set, it will be frequently necessary to remove not only the corresponding tooth of the first set, but also the lateral incisor; in ordinary cases, however, no such interference will be necessary, or even justifiable; but whether the removal of the lateral incisor be necessary or not, a considerable difference of size will generally be observable between the teeth of the first and those of the second set in favour of the latter. This, however, is not invariably the case; occasionally cases present themselves in which little difference in this respect exists, and from their being discoloured and disguised by an accumulation of tartar, it may be exceedingly difficult, relying solely upon the difference of size, to determine to which set they belong. An additional characteristic must then be sought, and this will readily present itself in

Second, The differences of form and configuration. The teeth most likely to be mistaken as belonging to the first set, are the first permanent molares, which, except by an experienced eye, are sometimes with difficulty distinguished from the second temporary teeth of that class; these, indeed, make their appearance in a situation posterior to the temporary molares, and therefore being superadded to the first set, and thus constituting the sixth tooth from the centre of the mouth, may in this manner be distinguished. But it frequently happens that one or more of the molar teeth of the first set may have been removed, and in such cases if enumeration be solely relied on, the judgment will be erroneous, or at least uncertain. The difference of size will also be a feeble auxiliary, for although the first molar tooth of the permanent set is the largest of all the teeth, yet the difference of size between it and the second temporary

molar will afford but little confidence in determining its character. In such cases the form and configuration become a most valuable criterion, and one of the most striking characteristic distinctions of this kind is the abrupt termination of the enamel on the neck of the tooth. On the permanent teeth the enamel, becoming gradually thinner as it ascends, terminates in an almost imperceptible line, and the exact boundary can scarcely be traced where this beautiful structure ceases to invest the bone of the tooth. The temporary teeth, however, present a very different appearance; on them the enamel, instead of being shaded off, as it were, as it approaches that portion of the tooth which is embraced by the gum, and which is termed the neck, continues of a uniform thickness, or nearly so, and ceases abruptly, forming a protuberant ridge immediately below the gum. There are other differences of form which will suggest themselves to those who are familiar with the subject; but there is probably none which is so well defined and so constant as that which has just been pointed out. This distinction may be observed equally in all the different classes of teeth, and is generally well marked in the incisors. Whatever may be the variations in the breadth of these teeth there is uniformly a great difference in the length, and therefore in cases in which the permanent incisors are developed only to the same extent as the temporary teeth of that class, while this ridge, marking the termination of the enamel, may be observed on the latter, a continuous even surface will be presented by the former, the whole of the crown of the tooth (the portions covered with enamel) not having emerged from the gum. Should the crown, however, have become fully developed, the difference may still be observed in so marked a manner on passing the finger nail over the tooth upwards, from the cutting edge, as to preclude doubt, or the possibility of mistake.

Another obvious and striking distinction, however, is to be found in

Third, The degree of abrasion which the teeth have suffered. This is more strikingly exhibited in the teeth situated in the anterior part of the mouth, but it belongs in a greater or less degree to all. It is obvious that teeth which have been fulfilling their functions for a period of from six to seven years, must have undergone some alteration, in form and appearance, from abrasion. The cutting edge of the newly-formed tooth will be completely invested with enamel, and will present a serrated or notched appearance, which in a short time becomes obliterated and worn down; at the time of shedding, however, the enamel has been entirely removed by abrasion from the edge, which appears thick and broad, with a dark line of bone included between the two layers of enamel investing the anterior and posterior surface of the tooth. Such an edge will be readily distinguished from the round, tapering, pearly edge of the newly-formed tooth. A similar deterioration occurs in the cuspid teeth, the points of which become worn down so that they may be still more readily distinguished than the incisors. The attrition of mastication does not, however, appear to produce an equal deterioration in the form of the crowns of the molar teeth, so that with respect to these teeth the most obvious and certain diagnosis will be found in the abrupt termination of the enamel at the neck.

Such are the most striking and palpable distinctions between the first and second sets of teeth; in addition to which may be mentioned, as an auxiliary, the relative position which they occupy in the mouth. Thus the temporary set, consisting of twenty in number, the first molar tooth of that set will be the fourth from the centre of the mouth; the second will in like manner be the fifth. This, then, will constitute the last of the temporary set, and will complete the number of twenty, which the child possesses up to the age of six or seven years, when a new molar tooth may be seen emerging from the gum, without displacing any of the temporary teeth, immediately behind the last molar of that set. This, which is the first molar tooth of the second set, will be the sixth from the centre of the mouth; from this period, therefore, to the age of thirteen or fourteen years (when the second permanent molar becomes developed), the child possesses twenty-four teeth. With respect to the diagnosis between the first and the second molar teeth of the permanent set, with which, when the examination is made with the view of arriving at a knowledge of age, it is of the utmost importance to be familiar, it has been already observed, that its distance from the centre of the mouth will generally determine the question. It may happen, however, that the first permanent molar has been removed, and the second has advanced nearly to the place which it occupied, and is in a forward state of development. The difference of form must, in such cases, be relied on. In the upper row the second may be distinguished from the first molar tooth, by its presenting on its inner, or palatine side, a round protuberant surface, and by its being marked on the crown by a triangular depression, while the first molar is of a square, or rather of a rhomboidal figure, divided by a cruciform furrow into four or five tubercles. In the lower row these distinctions do not obtain, and the difference of form between them is less strongly marked. As in the upper row, however, the first molar is larger than the second, and generally has the appearance of being divided into four prominences, with a small wedge driven into the external half of the transverse division. The second

is simply divided into four protuberances by a crucial line, or depression.

With these simple and obvious distinctions, with which any one may soon render himself familiar by a little practical application, almost the possibility of error will be precluded in the prosecution of this interesting and important subject.

The following is the result of an examination of the accuracy and value of the test, made Feb. 10, 1838, in the London Orphan Asylum, at Clapton:—

The total number of children examined was 307; of these there were 36 of nine years of age, and 48 of thirteen years of age. Of the former 28 were boys and 8 girls; of the latter 39 were boys and 9 girls. Of the 36 children of nine years of age, 30 would have been passed as being fully nine years of age, on an examination of their teeth, and 6 rejected. The real age of one of these was doubtful, and 3 would have passed by their height and general appearance. Of the 48 of thirteen years of age, 42 would have passed by their dental developments; 6 would have been rejected. Five of these were more than 4 feet 3½ inches in height, and the other, though short, had the general appearance of thirteen years of age, and was muscular. There were 5 girls, said to be under twelve years of age, who had the dental development of thirteen years; 2 of these were subsequently found to be nearly 13, and there is a possibility of error in the actual age of the remaining 3. There were 15 boys between 11½ and 12 years old, who presented the dental developments of 13 years, but there were 20 more whose developments were regular. The variations in height were very great, ranging in the 30 of nine years, who presented normal dental developments, from 3 feet 7 inches to 4 feet 1 inch.

TREATMENT OF SMALL-POX.

To the Editor of THE LANCET.

SIR:—May I beg the favour, through the medium of your excellent Journal, to make further report of the successful progress of a practice which I advocated in a contemporary journal in 1836, and which practice I am led to believe, originated with myself.* I am, Sir, your very obedient servant,

JOHN LANGLEY.

36, Tottenham-street,
June 15, 1838.

At the present time, when I regret to observe in this district, that that baneful disease, small-pox, has been and is still existing to a considerable extent, any mode of practice which has for its object and effect the amelioration of suffering, &c., ought to be freely promulgated. Since my publication of the following mode of practice, very many cases of small-pox have fallen under my treatment, and of those in which the pustules have by puncture and incision been evacuated, I have every reason to be satisfied that the desirable objects above alluded to have been invariably attained. In almost every case of small-pox where, from the malignity of its character, height of attendant inflammatory fever, and confluent nature of eruption, serious consequences are to be apprehended, upon the pustules acquiring a full and prominent vesicular character, before the lymph assumes its purulent appearance, I puncture with a lancet the most depending part of the inferior edge of the pustule, thereby leaving a perfect superficial covering of cuticle, obviating in a great degree the tendency to irritation resulting from the ingress of atmospheric air into the collapsed cyst, the superjacent cuticle falling as a plaster upon the secreting surface. The expression of relief afforded to the sufferer by this operation is most grateful, and may be somewhat adequately estimated by those who have experienced the comfort of having the contents of a whitlow evacuated. The desquamating process is not only facilitated, but greatly expedited, as in the course of three or four days, you have an extensive desquamation, occurring almost simultaneously over the whole surface, leaving discolouration, but seldom any depressions; and in cases where, for the sake of experiment, I have thus proceeded with one superior extremity, and neglected the other, the difference of result has been most manifest. The removal of the distressing tension, pervading so extensive a surface, and pressing upon such sensitive and irritable tissues, cannot fail to give the rationale of the relief afforded, and also the fair presumption, that the cerebral irritation and consequent fever resulting from such a painful condition, must be greatly modified, if not altogether obviated, independently of removing from the inflamed and abraded surfaces an immense quantity of morbific secretion, the reabsorption of which, to a certain extent, may be reasonably inferred. If, from a prejudice, which oft ignorantly prevails, of interfering with the natural course of naturally incidental diseases, certain persons might not grant the propriety of opening all the cysts (which, by-the-by, is no trifling task) surely they will make trial of the practice upon those parts, the preservation of which is so desirable.

* The practice of opening small-pox pustules has long been employed by M. Serres, of La Pitie. It was also extentively tried in some of the military hospitals of this country about fifteen years ago.—ED. L.